CAPACITY BUILDING OF TEACHERS THROUGH DISTANCE MODE USING TELECONFERENCEING AS AN INNOVATIVE TOOL

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ABSTRACT

Sarva Shiksha Abhiyan (SSA) is a national programme to the goals of Universalization of Elementary Education in India. Distance Education Programme (DEP) plays a major role in providing technical support to the states in building capacity among institutions and people at national, state, district and sub-district levels to design, develop, produce and deliver distance learning inputs and materials in a recurrent manner. Rajasthan Council of Primary Education, Jaipur and DEP-SSA, IGNOU, New Delhi has organized 07 content based teleconferences during the period January, 2005 to October, 2005 for the capacity building of elementary school teachers. The main Objective of the study was to find out the effectiveness of the capacity building of teachers through distance mode using teleconferencing as an innovative tool.

Method: the researcher was used survey method under descriptive research for investigating the impact of teleconference programmes organized on different topics and areas. Sample: The sample consists of 4775 elementary school teachers as participants from the different learning ends of the Rajasthan were selected for the study. Tools: The DEP-SSA, IGNOU developed structured opinionnaire/feedback format to know the effectiveness of teleconference programme. Data analysis: The collected data were tabulated and analyzed with the percentage techniques and it is presented in table. Finding: Most of the teacher respondents agreed on the positive contribution of teleconferencing towards capacity building of teachers.

Keywords: Distance Education, Teleconferencing, Teachers' Capacity Building, Univerzalisation of Elementary Education,

INTRODUCTION

Sarva Shiksha Abhiyan (SSA) is a national programme to the goals of Universalization of Elementary Education in India. It has been a national endeavour for which both the Central Government and State Government have been devising various measures through different modes.

The Distance Education Programme (DEP) has been envisaged as a national component and a major area of intervention in Sarva Shiksha Abhiyan (SSA). Distance Education Programme (DEP) is a major intervention in SSA which focuses on 'strengthening training through open distance learning'. DEP was established by the Government of India on the 1" of July, 2003 as an upgraded project of the erstwhile DEP-DPEP (Distance Education Programme -District Primary Education Programme) which had been in operation in 18 States and 7 UTs. This national project aims at providing need-based, local-specific in-service training to teachers, resource persons, DIET faculty and other functionaries involved in the elementary education programme.

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DEP plays a major role in providing technical support to the states in building capacity among institutions and people at national, state, district and sub-district levels to design, develop, produces and delivers distance learning inputs and materials in a recurrent manner. Under DEP-SSA project, various initiatives like appointing Distance Education Coordinators, constitution of the State Resource Group for Distance Education Programme (SRG-DEP), holding SRG meetings for identifying training needs, planning of activities, capacity building activities in distance learning material development and distance delivery modes have been undertaken in some States.

It has been maximally utilizing various means of communication to achieve the target of quality elementary education for all these media range from the prime medium, i.e., Print, Audio and Video material, Teleconferencing, Computer etc.

In North India States, Rajasthan has proved to be the most respective state utilizing the latest technology, i.e., teleconference, to reach its teachers all over the state, resolve their academic problems, motivate SSA functionaries to accomplish the targets of SSA and hence to promote eagerness to use open distance learning technology and of its determination towards achieving the target of quality education for all, Rajasthan Council of Primary Education, Jaipur and DEP-SSA, IGNOU, New Delhi, India has organized 07 content based teleconferences during the period January, 2005 to October, 2005 for the capacity building of elementary school teachers.

OBJECTIVES

The major objectives of the teleconferences were perceptions of teachers:

- ➢ To identify the appropriateness of the selection of Topic and Panelists.
- ➢ To evaluate the role of Anchorperson and Facilitator(s).
- ➢ To know the responses of the participants towards presentation of the content by the panelists.
- ➢ To find out the views of the participants towards "Interaction between Teaching end and Learning end".
- ➢ To find out the Quality of the Reception and Viewing Conditions.
- ➢ To find out the standard of off-air activities of the programmes.
- ➢ To assess the Effectiveness of the organized teleconferences.

METHOD

Distance education has become the need of the present time. It is making easier with the lot of advanced technologies. Teleconferencing is one of that. Lot of development is taking place in the field of such technology. It needs to be modified as per the new development and as per the requirement of the time. Therefore, the researcher was used survey method under descriptive research for investigating the impact of teleconference programmes organized on different topics and areas.

Sample
The sample consists of 4775 elementary school teachers as participants from the different learning ends of the Rajasthan were selected for the study.

Tools
The DEP-SSA, IGNOU developed structured opinionnaire/feedback format to know the effectiveness of teleconference programme. This structured opinionnaire was administered and analyzed for this purpose.

This opinionnaire contains 26 items covering different dimensions, i.e., Selection of the Topic, Role of the Panelists, Anchorperson, Facilitators, Presentation of the Content, Interaction, Quality of the Reception, Viewing conditions, Off-air activities, Effective areas etc.

Procedure of Data Collection
It involves careful administration of the feedback questionnaire/opinionnaire on all participants after the end of the each programme by the coordinators of the learning end for collecting valid information about the proposed study.

Data Analysis
The collected data were tabulated and analyzed with the percentage techniques and it is presented in table.

RESULTS AND ANALYSIS

Analysis and interpretation of data was carried out on various aspects of teleconferencing. The perceptions of elementary school teachers, content and presentation, programme design, interactivity, effect on teachers were some of the important areas considered for thorough analysis and interpretation.

Table: 1
General perception of teachers towards
teleconferencing as an innovative tool

Sl. No.	Items	Responses (%)		
		Agree	Disagree	Undecided
1	Technology of teleconferencing is easy to use	83.2	11.2	5.6
2	Technology motivated me to learn more and more	86.3	7.1	6.6
3	This technology is easily accessible	97.8	1.2	1.0
4	This technology can be used for different types of teaching and learning	82.5	4.3	13.2
5	Visuals and sounds of teleconferencing were clear	71.1	13.1	15.8
6	Technology of teleconferencing has scope for using a variety of visuals to support teaching-learning	82.2	12.4	5.4
7	Animations used in teleconferencing stimulate my interest	85.9	6.2	7.9
8	I am interested in using this technology for enhancing my professional development	92.0	1.4	6.6

The Table: 1 revealed that the majority of the respondents pointed out the teleconferencing programme were an innovative tool; it is easy to use and easily accessible. It is also shows that it is motivated teachers to learn more and more; use for different types of teaching and learning; use of variety of visuals to support teaching-learning. They also reported that this technique stimulate their interest and enhancing professional development. A few who did not respond to these items can be clubbed with those who disagreed.

Thus, it can be concluded that technology related issues of this innovative tool for teacher training had elicited positive responses from the elementary school teacher participant.

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Table: 2
Perception of teachers towards the content and
presentation issues of teleconferencing

Sl. No.	Items	Responses (%)		
		Agree	Disagree	Undecided
1	Content was adequate and relevant to the topic	89.6	6.3	4.1
2	Resource persons and panelist used clear and simple language	72.4	10.3	17.3
3	Resource persons explained the content with illustrations and examples	92.6	3.4	4
4	The content of teleconferencing was interesting	85.2	11.5	3.3
5	Resource persons used a friendly style of presentation	91.7	5.2	3.1
6	Organization of content was sequential and logical	96.3	2.1	1.6

As evident from Table 2, 92.6 per cent respondents agreed that the resource persons explained the content with illustrations and suitable examples and 96.3 per cent agreed that organization of content was sequential and logical. It is also clear that 91.7 per cent respondents agreed in resource person's way of style of presentation which shows very friendly with trainees and 89.6 per cent stated that the content was adequate and relevant to the topic.

The responses establish the efficacy of teleconferencing in putting across content through an easy to comprehend style of presentation. 72.4 per cent respondents agreed that resource persons and panelist used clear and simple language throughout the teleconferencing programme but 10.3 and 17.3 per cent reported that they are disagree and undecided respectively. 85.2 per cent respondents opined that the content of teleconferencing was interesting.

However 11.5 per cent of respondents felt that the content of the programme was not interesting and rest of the participants' silent towards this item. This analysis found that, the resource persons and panelists was needed to use more clear and simple language and at the same time there was a need to make the content of the teleconferencing somewhat more interesting.

Table: 3
Perception of teachers towards the programme design
related issues of teleconferencing

Sl. No.	Items	Responses (%)		
		Agree	Disagree	Undecided
1	Duration of the sessions was adequate	61.9	25.1	13
2	Resource persons used sufficient visual to make the presentation interesting	96.4	2.1	1.5
3	The session was judiciously divided for presentation and discussion	84.6	11.2	4.2
4	The pace of presentation was appropriate	88.7	6.2	5.1
5	Visuals were shown for adequate time	69.6	19.5	10.9
6	The texts and captions used were readable	95.9	3.4	0.7
7	Sessions of teleconferencing programme were designed with appropriate teaching-learning inputs	92.6	4.2	3.2

Table: 3 showing of the teachers perceptions who attended this training through teleconferencing about the progranne design related issues.

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About 96.4 per cent felt that resource persons used sufficient visual to make the presentation interesting but table 2 of item 4 shows that 11.5 per cent felt that the content of the progtamme was not interesting. Again 92.6 per cent or respondents were of the view that teleconferencing sessions were designed with appropriate teaching-learning inputs. This is demonstrated the positive features of learning through teleconferencing. More than 84 per cent felt that the session was judiciously divided for presentation and discussion and pace of presentation was appropriate.

However 11.2 per cent of teacher respondents not express their satisfaction on this issue. With regard to the duration of teleconferencing session, 61.9 per cent of teacher respondent found the duration of teleconferencing sessions adequate. At the same time 25.1 and 13 per cent of them did not showed their satisfaction and opinion respectively towards this issue. The overall it can conclude that the perception of teacher towards the teleconferencing programme design related issues were significant in relation to capacity building of the teachers.

Table: 4
Perceptions of teachers towards the interaction aspects of teleconferencing

Sl. No.	Items	Responses (%)		
		Agree	Disagree	Undecided
1	The time allotted for interaction was adequate	77.5	12.3	10.2
2	Interaction with the resource persons was adequate	69.6	29.2	1.2
3	Resource persons interacted effectively during the session(s)	83.4	15.2	1.4
4	Responses given by the resource persons were satisfactory	83.4	15.2	1.4
5	Teleconferencing sessions prompted us to participate in interaction	92.5	2.7	4.8
6	Participants from different learning centers interacted effectively with each other	96.3	2.1	1.6
7	We could clarify our doubts through telephone, internet, and fax	92.1	2.8	5.1
8	Questions put by participants from other learning centers promoted my understanding	95.1	2.6	2.3

Table: 4 reveals that more than 92.1 per cent teachers expressed their satisfaction with regard to the following aspects of interactive sessions of teleconferencing: i) participants from different learning centers interacted effectively with each other; ii) teacher participants clarified their doubts using telephone, internet (e-mail) and fax; iii) questions asked by participants from other learning centers promoted their understanding. These aspects were indeed crucial to the success and effectiveness of this innovative tool for training. More than 80 per cent of the respondents were satisfied with the responses given by the resource persons were satisfactory and quality of the interaction with resource persons. But in the other side 69.6 per cent of the respondents agreed on time allotted for interaction were adequate.

However 12.3 and 10.2 per cent shows their disagreement and silent respectively towards this issue. This is revealed that there was need to allot some more adequate time which may make the teachers for more interaction. With regards to interaction with the resource persons, 69.6 per cent respondents showing their satisfaction about this issue whereas 29.2 per cent felt that interaction with resource persons were not adequate. This shows that there was need for more interaction with resource persons on content issues.

Table: 5
Effectiveness of teleconferencing on teachers at learning end

Sl. No.	Items	Responses (%)		
		Agree	Disagree	Undecided
1	Teleconferencing helped me learn something new in my content area(s)	70.3	9.7	20.0
2	Teleconferencing helped me in organizing the content of teaching-learning	68.4	3.4	8.2
3	Teleconferencing motivated me for developing Teaching Learning Material (TLM)	68.3	30.3	1.4
4	Teleconferencing helped me in handling problems effectively in the classroom	72.5	18.5	9.0
5	Teleconferencing helped me attending to individual differences in the classroom	42.3	13.5	44.2
6	Teleconferencing motivated me to make my teaching innovative	69.4	8.6	22.0
7	Teleconferencing helped me understand the significant of inclusive education	82.3	5.2	12.5
8	Teleconferencing helped me appreciate the issues in girl's education	79.8	3.1	16.2
9	Teleconferencing helped me understand the importance of community mobilization	75.6	5.6	18.8
10	Teleconferencing helped me work out strategies for reducing dropout	84.6	3.4	12
11	Teleconferencing helped me in increasing enrolments	72.3	8.3	19.4
12	Teleconferencing helped me increase retention of children in the classroom	69.5	12.4	18.1

As seen from Table 5, only 70.3 per cent of respondents felt that teleconferencing helped them learn new concepts while 20 per cent of them did not respond to this item and 9.7 per cent of reported that disagree to this item. From this it can be concluded that this has important implications for quality improvement of teleconferencing sessions to make it an innovative tool of furthering capacity building of teachers.

With regards to the organization of the content of the sessions 68.4 per cent of respondents held favorable views on it while 8.2 per cent of them did not respond to this item. Almost 68.3 per cent of respondents viewed that teleconferencing sessions motivated them to develop teaching-learning materials. It revealed that teleconferencing sessions could not enable them in developing teaching-learning material and in making their classroom processes interesting and effective. About 42 per cent of the respondents felt that teleconferencing enable them to attend to the individual differences in classroom. At the other hand about 44 per cent did not share their views in this regard and 13.5 per cent said they did not get any help through this technique for attending to individual differences in the class room. It shows that the effectiveness of the teleconferencing in this regard needs to improve for the capacity building of the teachers.

Approximately more than 70 per cent of teachers reported satisfaction with respect to handling classroom problems and situations, innovations in teaching significance of inclusive education, issues of girls' education, community mobilization, strategies for reducing dropout and increasing enrolment. It is found that from this analysis the capacity building of the teachers through teleconferencing was positive and significantly effective.

FINDINGS

On the basis of analysis and discussions, the major findings of the study were as follows:

➢ **The majority of the teacher respondents pointed out the teleconferencing programme were an innovative tool.**

➢ **Selection of the topic of teleconferences was most appropriate as viewed by maximum teacher participants.**

➢ **Selection of the resource persons and panelists with regards to their content/context expertise was 'satisfactory' as suggested by more than 80 per cent participants.**

➢ **The resource persons and panelists were needed to use more clear and simple language and at the same time there was a need to make the content of the teleconferencing somewhat more interesting.**

➢ **The majority of the teacher shows their positive responses to wards duration of the session, use of visual to make the presentation interesting, pace of presentation, and appropriateness of teaching-learning inputs of teleconferencing programme.**

➢ **With regard to teachers perception towards the interaction aspects of teleconferencing was found that more than 92.1 per cent teachers expressed their satisfaction with regard to the following aspects of interactive sessions of teleconferencing: i) participants from different learning centers interacted effectively with each other; ii) teacher participants clarified their doubts using telephone, internet (e-mail) and fax; iii) questions asked by participants from other learning centers promoted their understanding. These aspects were indeed crucial to the success and effectiveness of this innovative tool for training.**

➢ **Almost 68.3 per cent of respondents viewed that teleconferencing sessions motivated them to develop teaching-learning materials. It revealed that teleconferencing sessions could not enable them in developing teaching-learning material and in making their classroom processes interesting and effective. About 42 per cent of the respondents felt that teleconferencing enable them to attend to the individual differences in classroom. At the other hand about 44 per cent did not share their views in this regard and 13.5 per cent said they did not get any help through this technique for attending to individual differences in the class room. It shows that the effectiveness of the teleconferencing in this regard needs to improve for the capacity building of the teachers.**

➢ **Effectiveness of the teleconference on increasing the level of knowledge and enhancing the level of understanding of participants is appreciated.**

IMPLICATION OF THE STUDY

From the points of view of the teaching functions, interactivity and user friendliness, *teleconferencing* emerges as an appropriate technology for reaching varied clientele groups in diverse settings. With the advancement of communication technologies and reduction of costs, various organizations are opting for this technology in their education and training programmes. Teleconferencing is essentially a means for communication and training. It can be used for information dissemination, guidance in response to policy, consultations with experts, focused group discussions, interviews, etc. As a technology, it has broad applications in education, training and development, business/corporate communication, governance and professional and medical courses/services.

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In the academic area, teleconferencing is useful for the following activities: Delivery of full courses, lessons, tutoring, project work and training can be provided to the students through teleconferencing, Delivery of certificate level courses for professional development. These courses can be modular and multi-media in nature comprising print, contact programmes, and audio-video conferencing. Partial support to courses through counseling, etc., Introduction of short/new courses in skill development, vocational training, professional development, and to address problems related to introduction of new curriculum, and lack of teachers and facilities, Tutoring in difficult areas of the curriculum, Remedial learning and off-hours teaching can be provided, Enrichment, updating, guidance to additional learning resources, extension of existing courses and Interaction by students with scientists, experts, decision and policy makers, etc. to obtain multiple perspectives on an issue. Apart from academic activities, teleconferencing is used for administrative matters such as: Problems solving and counseling on admissions, examination, status of courseware materials distribution, Guidance and advice on course content, expectations, assignments, grading, credits, etc.

The major emphasis is to strengthen the on-going training programmes for teachers and other functionaries by providing distance learning inputs and materials. Policy makers, programme designers, strategy planners and educationists need to focus on maximizing potentials of teleconferencing for capacity building of teachers and other functionaries to procide quality education to all in our country. The programme intends to evolve a sustainable system of in-service training linked to improve the effectiveness of the teaching learning process in the primary schools and meeting the social demands for universalisation of primary education in the country. Effective handling and strategic planning of this technology for deriving maximum benefit out of it is the real need to achieve the target of Sarva Shiksha Abhiyan (SSA), Universalisation of Elementary education (UEE), Education for All (EFA) as well as quality education.

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