

Impact Of Face-To-Face Workshop On The Achievement Of Distance Teacher Trainees

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ABSTRACTS

The present paper empirically validates the assumption that face-to-face workshop contributes to achievement of distance teacher trainees, with a sample of 74 in-service teacher trainees of IGNOU. The results of the study indicate that workshop inputs significantly contributed to the achievement of the participants.

INTRODUCTION

Distance education has been witnessing unprecedented expansion in the recent past, and is now recognized as a proven means of extending, to a large number of aspirants, access to educational provisions, right from primary to tertiary levels, in most countries of the world. Since its inception a century before, it has metamorphosed itself considerably from correspondence education to virtual education. Distance education programmes are being offered with the help of a plethora of interactive media – printed material, audio-video programmes, teleconferences, internet, academic counselling, assignments, face-to-face workshops, project work, practical works, etc. However, these technologies may influence learning in unanticipated ways if used without understanding the implications for student learning (Maher, 1998). 'Distance education is currently experiencing great growth in new applications of interactive technologies, but we have not guarantees that, without critical reflection on our practice, we will produce any significant growth toward transformative learning, toward the development of personal empowerment and critical abilities to question rather than to accept assumptions, beliefs and expectations about one's role in the World' (Burge and Haughey 1993:2). Hence, it is assumptions which have driven distance education theoreticians and practitioners to believe that different distance education technologies induce student learning. Although such assumptions may be true, they need to be empirically validated.

THEORETICAL FRAMEWORK

One can find a number of empirical validations pertaining to student reactions or perceptions to distance education from several perspectives. Similarly, comparative effectiveness of distance education and traditional education systems has also been studied in terms of several variables. For example, researchers have examined student feedback on print material (Sahoo. 1985; Koul 1988; Kamau 1995), on academic counselling (Nagaraju 1982; Sahoo 1985), on audio video programmes (Sahoo and Patri, 1998), on assignments (Biswal 1979 and Sahoo 1985), on delivery of printed material (Nagaraju 1982; Sahoo 1985). Similarly, educators who continue to employ alternate modes of study, and those who continue to participate in them, report distance delivery to be positive (Barker and Platten 1989). Others have also reported that student achievement levels in distance learning are comparable, if not slightly higher than those learning in the traditional face-to-face classroom (Kirby and Chugh, 1993).

However, these studies do not validate the assumption that different distance education technologies contribute to student learning or achievement. Of course, a few studies have attempted to examine this aspect. For example, Maher (1998) studied the impact of delivery media on student learning. Fritsch and Strohle (1998) examined the effect of mentor support on the performance of distance education students. Ritchie and Newby(1989) compared the effect of classroom lecture / discussion and live televised instruction on student performance, attitude and interaction. But, there is hardly any study which has examined the impact of face-to-face workshop on the academic achievement of distance teacher trainees. The present study is an attempt to assess the impact of face-to-face workshop on the academic achievement of distance teacher trainees of Indira Gandhi National Open University (IGNOU), India.

IGNOU launched a Bachelor of Education (B.Ed) programme in 2000, to meet the professional requirements of untrained graduate teachers working at different levels of education. The programme, with 48 credits, has a duration of two years in the minimum or four years in the maximum. The programme comprises eight theoretical courses of four credits each and practical courses of sixteen credits. The instructional components of the programme consists of self-learning materials, academic counselling, assignments, audio-video programmes, teleconferences, school-based activities, and face-to-face workshops. Although it is assumed that each of these instructional components does have an impact on the achievement of the teacher trainees, there is hardly any empirical evidence in support of such an assumption. Of course, there have been studies of teacher trainees' feedback on the various components of the programme. Sharma and Singh (2001) found that reactions of the student teachers to a

large extent were positive on the major components of the B.Ed programme. Sharma (2002) found that reactions of the student teachers on major components of the B. Ed programme were positive except interaction of students with peers as well as teacher educators, audio-video inputs, discussion of assignment questions by the resource persons, feedback on the assignments. Shukla (2002) found that student teachers rated IGNOU B. Ed programme more comprehensive and better than the conventional B. Ed programme. Rastogi and Sahare (2003) found both SIM and TCR strategy equally effective in raising level of knowledge of B. Ed students. But none of these researches has attempted to find out whether face-to-face workshop has an impact on the understanding of the teaching skills of distance teacher trainees. Similarly, whether face-to-face workshop has any impact on the understanding of teaching skills of distance teacher trainees in terms of their sex, age, residential background, educational qualification, school background, subjects of study, etc. Hence, a study was undertaken to assess the impact of face-to-face workshop on the academic achievement (knowledge, understanding and application of skills) distance teacher trainees of IGNOU.

OBJECTIVES OF THE STUDY

1. To study the impact of face-to-face workshop on the academic achievement of distance teacher trainees.
2. To study the impact of face-to-face workshop on the academic achievement of distance teacher trainees in terms of their sex.
3. To study the impact of face-to-face workshop on the academic achievement of distance teacher trainees in terms of their age.
4. To study the impact of face-to-face workshop on the academic achievement of distance teacher trainees in terms of their residential background.
5. To study the impact of face-to-face workshop on the academic achievement of distance teacher trainees in terms of their educational qualifications.
6. To study the impact of face-to-face workshop on the academic achievement of distance teacher trainees in terms of their school background.
7. To study the impact of face-to-face workshop on the academic achievement of distance teacher trainees in terms of their medium of instruction opted for in the
8. B. Ed programme
9. To study the impact of face-to-face workshop on the academic achievement of distance teacher trainees in terms of their subjects of teaching in the school.

HYPOTHESES OF THE STUDY

The following null hypotheses were formulated to empirically validate the above objectives.

1. There will be no significant difference between the mean scores of the distance teacher trainees in the pretest and the posttest in general.
2. There will be no significant difference between the mean scores of the distance teacher trainees in the pretest and the posttest in terms of their sex.
3. There will be no significant difference between the mean scores of the distance teacher trainees in the pretest and posttest in terms of their age.
4. There will be no significant difference between the mean scores of the distance teacher trainees in the pretest and posttest in terms of their residential background.
5. There will be no significant difference between the mean scores of the distance teacher trainees in the pretest and the posttest in terms of their educational qualifications.
6. There will be no significant difference between the mean scores of the distance teacher trainees in the pretest and the posttest in terms of their schools they are teaching in.
7. There will no significant difference between the mean scores of the distance teacher trainees in the pretest and the posttest in terms of their medium of instruction opted for in the B. Ed programme.
8. There will no significant difference between the mean scores of the distance teacher trainees in the pretest and the posttest in terms of their subjects of teaching in the school.

DELIMITATIONS

The study was delimited to teacher trainees of IGNOU in Arunachal Pradesh, a state situated in the north-eastern part of India bordering China and Myanmar, enrolled for the B. Ed programme, during the academic session 2003-2004. It was delimited to the assessment of impact of twelve day compulsory face-to-face 1st year workshop on the academic achievement of the teacher trainees, organized during July 21 to August 01, 2003, at the IGNOU Regional Centre, Itanagar, the capital of the state.

METHODOLOGY

In order to obtain empirically dependable answers to the research questions, and to test the formulated hypotheses, a pretest and posttest single group experimental design was adopted. A total number of 82 teacher trainees participated in the experiment. But, 74 teacher trainees, who took both the pretest and the posttest, constituted the final sample. Table 1 shows the profile of the final sample.

Table 1: Profile of the Final Sample

Sex	Male: 45	Female: 29	
Age	21-30 yrs: 49	31-40 yrs: 22	41-50 yrs : 03
Residential Background	Urban: 29	Rural: 45	
Educational Qualification	Graduate: 48	Post graduate: 26	
Type of School	Primary School: 23	Middle School: 23	Secondary & Senior Secondary : 28
Medium of Instruction opted for	English Medium: 63	Hindi Medium: 11	
Subjects of Teaching in the School	Maths & Sciences: 19	Languages: 18	Social Studies : 37

For the experiment, an achievement test comprising 32 items covering all the important components of the workshop was developed. The test items, which focused on knowledge, understanding and application levels of Bloom's Taxonomy of Educational Objectives were validated by the resource persons. The test was administered to the group in the beginning of the workshop. The teacher trainees had already gone through the self-learning materials prior to the workshop. However, 32%, 17%, 2.5% of the participants had exposure to face-to-face counselling, video programmes, and audio programmes respectively. The low percentage of participants' exposure to these interactive media may be due to the long distance they have to cover in the Himalayan Mountain ranges of Arunachal Pradesh, to access these resources at the Regional Centre. It was followed by the workshop activities conducted by seven resource persons including the researcher. The major instructional skill components covered during the workshop were unit and lesson planning, teaching skills, alternative instructional

methods, psychological testing, individual and group projects, guidance and counseling skills, skill of preparing a question paper, action research, etc. All sessions were organized with conceptual presentations by the resource persons followed by individual and group works, peer interaction, exposure to audio-video programmes, and consultation with SLMs. After the end of the workshop, the same test, used as posttest, was administered to the group. The data, thus collected, were analyzed with the help of mean, standard error of mean difference (SEMD), and 't' test.

RESULTS

The results of analyses of data are presented below based on the objectives of the study and their corresponding null hypotheses.

Impact of Workshop on the Achievement in general

Table 2: Means, Standard Error of Mean Difference and 't' value for the pretest and posttest on the impact of workshop on the achievement.

Test	N	Means	SEMD	t value	Levels of Significance
Pretest	74	17.64	0.38	11.08	Significant at 0.01 and 0.05 levels
Post test	74	21.85			

The Table 2 shows that the t-value of 11.08 is significant at .01 and .05 levels. This indicates that there is significant difference between the mean scores of the distance teacher trainees in the pretest and posttest, rejecting the null hypothesis for the first objective. This implies that the inputs provided during the workshop significantly improved the achievement of teacher trainees on the different components of the workshop.

Impact of Workshop on the Achievement of Teacher Trainees Sex wise

Table3: Means, Standard Error of Mean Difference and t-values for the pretest and posttest on the impact of workshop on the achievement sex wise.

Sex	Test	N	Means	SEMD	t-values	Levels of significance
Male	Pretest	45	17.91	.58	6.32	Significant at .01 and .05 levels
	Post test	45	21.58			
Female	Pretest	29	17.24	.51	9.86	Significant at .01 and .05 levels
	Post test	29	22.27			

The Table 3 shows that the t-values of 6.32 for male and 9.86 for female groups are significant at .01 and .05 levels. This indicates that there is significant difference between the mean scores of male and female teacher trainees in the pretest and posttest, rejecting the null hypothesis for the second objective. Since the means of 21.58 and 22.27 for male and female in the posttest respectively are higher than the means of 17.91 and 17.24 for male and female groups, respectively, in the pretest, it implies that both male and female teacher trainees were benefited by the workshop.

Impact of Workshop on the Achievement of Teacher Trainees Age wise

Table 4: Means, Standard Error of Mean Difference and t-values for the pretest and post test on the impact of workshop on the achievement age wise.

Age	Test	N	Means	SEMD	t-values	Levels of significance
21-30 (years)	Pretest	49	17.67	.47	9.42	Significant at .01 and .05 levels
	Post test	49	22.10			
31-40 & 41-50 (years)	Pretest	25	17.60	.83	4.53	Significant at .01 and .05 levels
	Post test	25	21.36			

The table 4 shows that the t-values of 9.42 for the age group of 21-30 years and 4.53 for the age group of 31-40 and 41-50 years are significant at .01 and .05 levels. The group belonging to 41-50 has been clubbed with 31-40 group due to less number of participants. This indicates that there is significant difference between the mean scores of both the age groups in the pretest and posttest, which rejects the null hypothesis for the third objective. Since the posttest means for both the groups are higher than the pretest means, it implies that both the groups were benefited by the workshop.

Impact of Workshop on the Achievement of Teacher Trainees according to their Residential Background

Table 5: Means, Standard Error of Mean Difference and t-values for the pretest and post test on the impact of workshop on the achievement residential background wise.

Residential Background	Test	N	Means	SEMD	t-values	Levels of significance
Urban	Pretest	29	17.65	.57	7.80	Significant at .01 and .05 levels
	Post test	29	22.10			
Rural	Pretest	45	17.64	.58	6.97	Significant at .01 and .05 levels
	Post test	45	21.68			

The Table 5 shows that the t-values of 7.80 for urban teacher trainees and 6.97 for rural teacher trainees are significant at .01 and .05 levels. This indicates that there is significant difference between the mean scores of both urban and rural groups in the pretest and post test, which rejects the null hypothesis for the fourth objective. Since the posttest means for both the groups are higher than the pre test means, it implies that both the groups' performance improved because of the workshop.

IMPACT OF WORKSHOP ON THE ACHIEVEMENT OF TEACHER TRAINEES' QUALIFICATION WISE

Table 6: Means, Standard Error on Mean Difference and t-values for the pretest and post test on the impact of workshop on the achievement of teacher trainees' qualification wise

Qualifications	Test	N	Means	SEMD	t-values	Levels of significance
Graduate	Pretest	48	17.42	.44	9.05	Significant at .01 and .05 levels
	Post test	48	21.40			
Post graduate	Pretest	26	18.08	.84	5.49	Significant at .01 and .05 levels
	Post test	26	22.69			

Table 6 shows that the t-values of 9.05 for graduate group and 5.49 for post graduate group are significant at 0.01 and .05 levels. This indicates that there is significant

difference between mean scores of both graduate and post graduate groups in the pretest and the posttest, which rejects the null hypothesis for the fifth objective. Since the posttest means for both the groups are higher than the pretest means, it is concluded that the groups performance improved due to the workshop.

IMPACT OF WORKSHOP ON THE ACHIEVEMENT OF TEACHER TRAINEES ACCORDING TO THE TYPE OF SCHOOL THEY ARE TEACHING IN

Table 7: Means, Standard Error of Mean Difference and t-values for the pretest and post test on the impact of workshop on the achievement of teacher trainees' school type wise.

Type of School	Test	N	Means	SEMD	t-values	Levels of significance
Primary School	Pretest	23	17.13	.06	8.27	Significant at .01 and .05 levels
	Post test	23	22.09			
Middle School	Pretest	23	18.26	.70	5.10	Significant at .01 and .05 levels
	Post test	23	21.83			
Secondary and Senior Secondary School	Pretest	28	17.71	.77	5.61	Significant at .01 and .05 levels
	Post test	28	22.04			

The Table 7 shows that the t-values of 8.27, 5.10 and 5.61 for primary school, middle school, secondary and senior secondary groups respectively are significant at .01 and .05 levels. The senior secondary group has been clubbed with secondary group. This indicates that there is significant difference between mean scores of all three groups in the pretest and posttest, which rejects the null hypothesis for the objective six. Since the posttest means for all three groups are higher than the pretest means, it is concluded that all three groups were benefited from the workshop.

Impact of Workshop on the Achievement of Teacher Trainees according to Medium of Instruction opted for in the B.Ed Programme.

Table 8: Means, Standard Error of Mean Difference and t-values for the pretest and posttest on the impact of workshop on the achievement of teachers trainees' medium of instruction

Medium of Instruction opted for	Test	N	Means	SEMD	t-values	Levels of significance
English	Pretest	63	17.87	.44	9.75	Significant at .01 and .05 levels
	Post test	63	22.16			
Hindi	Pretest	11	16.36	1.16	4.00	Significant at .01 and .05 levels
	Post test	11	21.00			

The Table 8 shows that the t-values of 9.75 and 4.00 for English and Hindi groups respectively are significant at .01 and .05 levels. This indicates that there is significant difference between mean scores of both the groups in the pretest and the posttest, which rejects the null hypothesis for objective seven. Since the posttest means for both the groups are higher than the pretest means, it is concluded that the performance of both groups improved due to the workshop.

Impact of Workshop on the Achievement of Teacher Trainees according to the Subjects of Teaching

Table 9: Means, Standard Error of Mean Difference, t-values for the pretest and the posttest on the achievement of teacher trainees according to their subject of teaching

Subjects of Teaching	Test	N	Means	SEMD	t-values	Levels of significance
Maths and Sciences	Pretest	19	18.53	.72	6.65	Significant at .01 and .05 levels
	Post test	19	23.32			
Languages	Pretest	18	16.56	.98	5.16	Significant at .01 and .05 levels
	Post test	18	21.61			
Social Studies	Pretest	37	17.72	.57	6.12	Significant at .01 and .05 levels
	Posttest	37	21.22			

It is evident from the Table 9 that the t-values of 6.65, 5.16 and 6.12 for Maths and Sciences, Languages and Social Studies groups are significant at .01 and .05 levels. Hence, there is significant differences in the mean scores of these groups in the pretest and the posttest, which rejects the null hypothesis for objective eight. Since the means of posttest are higher than the means of the pretest, it is concluded that all the three groups were benefited by the workshop.

DISCUSSION

Results of the study indicate that inputs in the face-to-face workshop improved significantly the achievement of distance teacher trainees, even though they were provided theoretical inputs through the SLMs and other means. This validates the assumption that learning from SLMs and other means gets strengthened by supplementary interactive media like face-to-face skill development workshop. This is evident from the higher posttest mean score of the teacher trainees, which is due to the learning inputs from the workshop, and the lower pretest mean score which is owing to learning inputs from the SLMs and other means. Further, data analysis provides that workshop impacted on the achievement of teacher trainees in terms of their sex, age, residential background, educational background, school background, medium of instruction opted for in the B. Ed programme and subjects of teaching in the schools. This means that these variables did not intervene in the achievement of teacher trainees gained out of the workshop. Thus, it is concluded that face-to-face workshop contributed significantly to the achievement of distance trainees. But this finding is not consistent with earlier findings. Salomon and Clark (1977) reported that achievement on performance tests was similar regardless of the medium used. Similarly, Richie and Newby (1989) reported that media (face-to-face versus television) were not significant factors on achievement. These studies ruled out the significance of different media for achievement, whereas the present study found that the face-to-face workshop contributes to the achievement of the learners. The finding of the present study is in line with the study by Fritsch and Stohlein(1988), who reported that mentor support was helpful in terms of academic achievement.

CONCLUSION

Distance education generally operates through a number of interactive media. It is theoretically assumed that these media contribute to academic achievement of the learners. However, such an assumption has to be empirically verified. The present paper is the outcome of a research study which has validated the assumption that face-

to-face workshop does contribute to student learning. But the findings of the study are exclusively based on the objectives and research design adopted for the study. For arriving at any kind of generalization regarding the findings, further research studies need to be conducted on different samples, and with the same or different variables. However, the present research underlines the significance of face-to-face workshop for academic achievement in teacher education programmes.

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