

# Evaluation of Training Effectiveness in State Administration: A Cross-sequential Study

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## ABSTRACT

In the recent years, the government in J&K takes developing human expertise more seriously than ever before. However, human resource development evaluation practices in J&K is somewhat overlooked in issues connected to learning, training to transfer and organizational results. To help close the gap, this study examined the degree to which dimensions pertaining to three levels of the Kirkpatrick's Evaluation Model assess the effectiveness of State sponsored training program. Data were obtained from a nonrandom sample of 467 teacher trainees at Time1, 352 teacher trainees and 42 supervisors at Time2. The descriptive analysis revealed the inherent disliking of training programs among trainees', lack of expertise of non-professional trainers, poor communication between trainees' and administrators and absence of rewards. The lack of skills application even inhibits to improve classroom discipline, management of time and use of appropriate learning tools thereby stressing the need to recognize work environment factors that can facilitate transfer.

**Key Words:** Immediate learning, Behavior, Attitude, Satisfaction, Rewards

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## INTRODUCTION

The ever growing need for individual and organizational development can be attributed to numerous demands, including sustainability and maintaining superiority in the marketplace, enhancing employee skills and knowledge, and increasing productivity (Arthur et al, 2003). While the academic research has confirmed the significantly positive relationship between various HRM systems and activities and organizations' success (c.f. Edgar & Geare, 2005; Fiorito, 2002; Guest, 2002, 1997; Nazir, 2008), most of the HRM programmes, policies and practices are however, developed in organizations without cognizance to such research evidences (Goldstein & Ford, 2002; Rynes et al, 2002) and are not subjected as a consequence to any measurement (Bernardin, 2008) either. Even as this holds true about all the HR activities alike, the need for measuring the effectiveness of training programmes however, assumes a greater significance given the amount of money and time involved in its arrangement and organization. Moreover, training acts as a means of improving human potential and increasing the efficiency of personal (Patel, 1946), leads to employee satisfaction, reduction in labor turnover and number of accidents and increase in employee morale (Miller, 1997), helps to remove or improve current or anticipated performance deficiencies (Schuler, 1993). Training is a systematic and planned process of imparting and providing learning experience in order to bring about improvement in employees' performance and enable them to make their contribution in greater measure in meeting the objectives and goals of an organization. Training involves the acquisition of Knowledge, Skills, Abilities (KSA), concepts, attitudes and behaviour to enhance the job performance. It is a process of learning a sequence of programmed behaviour and helps employees to get hold of abilities to aid in accomplishment of organizational goals.

Some assert that companies who treat training and development as a fundamental requisite have been in great measure rewarded for this philosophy (See, David & Mary, 2009), and is argued to be related to giving an organization a sustained competitive advantage besides a sound business investment that assists an organization to achieve the desired performance at all levels (London Institute of Personnel Management, 1979). The significance and value of training is also reflected in the popular and repeated quotation by Confucius that goes "Give a person a fish and you feed him for a day; Teach a person to fish and you feed him for a lifetime" (Susan, 2002). Scholars like Patel (1946) have rightly endorsed training as a means for improving human potential and increasing the efficiency of personnel. Research further indicates that "potential returns

from the well-conducted training programmes hefty, considerable planning and evaluation are however, necessary to realize these returns” (Cascio, 2006) and most companies recognize the significance of evaluation, few actually assess their training programmes (Sales & Kosarzycki, 2003). A review of Fortune 500 companies for example discovered that only a handful number conduct the sound evaluation of their programmes (Clegg, 1987).

Given the magnitude of research suggesting the importance of evaluation of training programmes (Jones et al, 2011; Kirkpatrick & Kirkpatrick, 2006; Philips, 1996), the present study was undertaken to evaluate the effectiveness of training programmes organized by the District Institute of Education and Training (DIET) for Government teachers in the State of Jammu & Kashmir.

### **Training Evaluation**

While there is an ample evidence of and need for teacher training, however, same shouldn't be conducted haphazardly. As training programs entail certain costs; therefore, it must derive the best and desired payback thus necessitating its conduct in a systematic and scientific manner involving the sequential steps like identification of training needs is claimed to be prerequisite for a meaningful training programme (Noel & Lau, 1998), and should not be undertaken in a 'quick and dirty' fashion (CIPD Report, 2008). This should be followed by designing and implementation and evaluation of the training programmes as argued by a number of researchers (see for example, Alliger et al, 1997; Bernardin, 2007; Guskey, 2009).

Werner and DeSimone (2006), proposed that training evaluation is a systematic collection of descriptive and judgemental information related to training decision of selection, adoption, value and modification of various instructional activities. Training evaluation is constructed to assess the training outcomes based on predetermined individual and organizational objectives. In essence, training evaluation measures the value of worth of the programme (Guskey, 2009; Merwin & Pike, 1992), as the continuation of training programmes in future largely depends upon the result/s of the previously organized programmes. Training researchers unanimously agree, therefore, the relevance of evaluating training (e.r., Goldstein, 1993) with an equal agreement over the difficulty of doing so (Carnevale & Schulz, 1990).

Research has also advocated that in order to make training evaluation worthy, the training criteria must be psychometrically sound, meaningful to decision makers and must be collected within the given organizational constraints (Tannenbaum & Woods, 1992). Moreover, there is no other way to justify the investment in trainings in future unless its fruits are evaluated and documented besides being communicated to the management for its effectiveness. In fact, training programmes need not be just customary for evaluation purposes per se but for making amends and improvements in it. As argued by Kirkpatrick and Kirkpatrick (2006), training evaluation is warranted on three important grounds: i) to justify the existence and budget of the training department by showing how it contributes to the organizations' objectives and goals; ii) to decide whether to continue or discontinue the training programmes; and iii) to obtain information on how to improve future training programmes.

### **Teacher Learning & Evaluation**

Teacher learning has not until recently been considered a priority area of investigation. Numerous models of teacher learning have examined a range of ideas such as reflection, personal, social and cognitive growth, teaching craft elements and the essential specific prescriptions/characteristics and programme features that promote effective learning (Bell & Gilbert, 1996; Lave, 1988; Magolda, 1996; Villegas-Reimers, 2003). However, an interesting perspective about teacher learning can be obtained from the work of Guskey (2000) who linked evaluation with teacher learning. Guskey (2000) made use of Kirkpatrick's (1994) multi-level model to link evaluation with the planning for effective professional learning. Kirkpatrick's approach, initially developed for business and management contexts. But over the years, the framework has been used extensively in other fields (Carnevale & Schulz, 1990; Dixon, 1996; Gordon, 1991; Philips, 1991, 1997).

Kirkpatrick's model rests on four simple questions that translate four levels of evaluation i.e. reaction, learning, behavior and results. Majority of studies have found this model more easy and convenient to apply for evaluating training programmes. But a number of attempts were made by researchers to replace the Kirkpatrick's model (see for example, Aliger and Janak, 1989), however, no major achievement could be made by them in replacing the said model.

The present study used the same model with necessary changes. For instance, Reaction i.e., level I of Kirkpatrick's model, assesses how well trainees' liked or disliked training and Learning i.e., level II, acts as a measure of trainees' learning. In present study, these two levels were combined under the construct Immediate Learning and Satisfaction. Level III assesses the extent to which the teacher trainees' applied their learning back on their actual job-performance. In the present study, the level III was assessed under construct Utility Learning, with the object of assessing trainee behavior i.e. transfer of learning. Therefore, Kirkpatrick's model was used with slight modifications in the present study, and a conceptual framework under the construct Immediate Learning & Satisfaction and Utility learning was proposed.

### Immediate Learning and Satisfaction

In building this model, we took cue from two models, one proposed by Kirkpatrick (1959), and the other by Giangreco et al., (2009). In fact, the basis of our model is on combining these two under one construct namely Immediate learning. Kirkpatrick & Kirkpatrick (2008) stressed that it is the trainees' reactions which affect learning. In other words, trainees reaction determine the elements of training programme with which trainees' are satisfied like training content, trainers, material, process etc. Moreover, Kirkpatrick & Kirkpatrick (2008) also advocated that trainees' should be able to realize that training programmes are closely related to their every day job activities i.e., training usefulness.

Similarly, the variables recognized by Giangreco et al. (2009) under the theme reaction included perceived training efficiency, perceived training usefulness, and perceived trainer performance. But, it is important, to make a thorough study on each & every aspect of trainee's reaction and learning with the associated training programme. Therefore, the present study considered it proper to focus on variables i.e., perceived training efficiency, perceived training usefulness and perceived trainer performance; and divided them into six variables, which include General satisfaction, Trainers, Training usefulness, Training content and delivery, Training facilities, and Training location. Besides, two additional variables were also considered i.e., attitude and training organization, as stressed by researchers (see for example, Roa, 1992; Pareek, 1989; and Wong & Wong, 2003). Therefore, the present study examined the variables which make up Immediate/affective learning as reflected in the model 1.

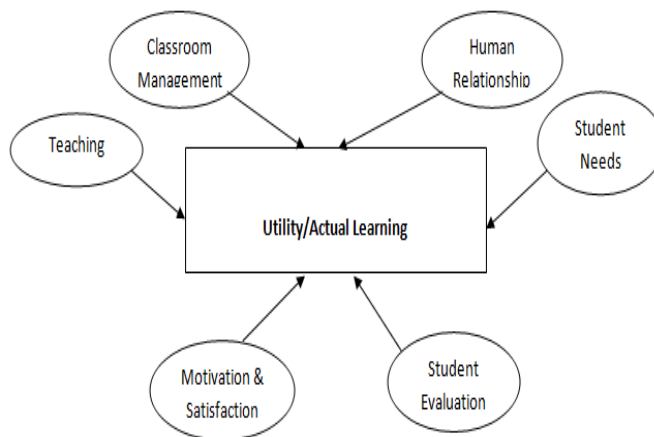
### Utility Learning/Behavior

In 2008, Tella stressed that changes in teacher behavior are achieved when teachers are able to build on learning experience, abilities, motivation and skills. And, teachers knowledge gets reflected when they have reasonable range of instructional strategies and the techniques which help to meet the diverse needs of school as well as students. It is pertinent to mention here that research has stressed the important role of 'human interaction' as the essence of quality teaching and behavior (Dwyer & Villegas, 1993) while researchers (see for example, Glatthorn & Fox, 1996, p.1) on the other hand have defined Quality teaching as "teaching that maximizes learning for all students". Because it is far more important that educational outcomes are not only determined by what is taught i.e., curriculum, but also by how well it is taught i.e., method (Brophy, 1979). This is not only good for effective schooling but also helps to recognize how effective teacher training have been in terms of application of skills, which can be observed or experienced that teachers are able to bring some gains in student learning. Researchers (see for example, Anderson et al., 1979; Brophy & Evertson, 1978; Good & Grouws, 1977) have found that teachers who are able to bring substantial gains in students learning possess characteristic of effective classroom management.

Notably, the study takes multidimensional view of teacher behavior and focuses on the variables or antecedents which reflect behavior by examining all variables represented at school. Besides, the selection of variables is in consistence with the research studies on teacher behavior (see for example, Glatthorn & Fox, 1996; Slick, 1995, Porter & Bryophyte, 1988; Dwyer & Villegas, 1993; Tella, 1998).



Model 1: Immediate/Affective learning



**Model 2:** Utility/Actual Learning

Therefore, the study focused on identified variables of teacher behavior, particularly those discussed thoroughly by researchers, academicians and scholars in the realm of teacher training literature. Almost eight variables have been identified under the head transfer of teacher training namely: Teaching, Classroom management, Human relationship, Student needs, Student evaluation, and Motivation & Satisfaction.

#### **Rationale For The Present Study (Scope)**

Training & Developing of the human resource has been the priority of the Government, costing the exchequer a huge sum annually. As per one of the reports, Government spending on 'Education' in 2015 was 3.3% of GDP (World Bank, 2015). Because training & development of teachers in an education sector and their transfer of skills has a strong potential to directly influence the future of our nation as generation of today who will make up the nation of tomorrow are nurtured and guided in schools. Therefore, the better the quality & standard of guidance and nurturance, the better & brighter will be our nation. In other words, a better way to prepare our students is to prepare our teachers (cited in, Davies, 1977). There is no denying the fact that teaching is a demanding, critically important profession and teachers good in teaching hold the key to pupil's success (Davies 1997). The aim of continuous training activities is to "actualize, develop and widen knowledge obtained by teachers in their initial training and to offer them new and professional knowledge and competences" (cited in - OECD, 2005: p.122). In context to the State of Jammu & Kashmir, the school administration remains always in news for the poor and abysmal performance of students especially in the Board exams. Amidst a number of initiatives been taken by the Government and amongst the various initiatives, the Government seems to be spending lavishly on the teacher training as indicated by the number of training programs conducted from 2007-12:

**Table 1.1 Number of In-service Teachers at BRC Level and Resource Persons Trained in Jammu & Kashmir Division During 2007-12**

Districts	Number of Teachers	Financial (Lac's)
Kathua	8423	159.13
Samba	2525	47.32
Jammu	10264	182.21
Rajouri	10864	183.17
Poonch	11344	205.01
Reasi	2876	57.25
Udhampur	9022	138.32
Doda	6184	95.03
Kishtwar	2920	58.40
Ramban	3888	77.76
Srinagar	13323	179.21
Budgam	6237	127.32
Anantnag	9346	146.27
Pulwama	7122	97.01

Baramulla	11712	172.13
Kupwara	3677	44.14
Leh	2913	58.45
Kargil	1877	37.21

**Source:** State Project Director, SSA (5/5/2013).

Although lots of initiatives have been taken over the past several years but there doesn't seem to be any substantial improvement in the overall performance of Government schools in terms of the results of the students especially at the high school level. As advocated by NCTE (2009) in its report, "the training of teachers is a major area of concern at present as both pre-service and in-service training of school teachers are extremely inadequate and poorly managed in most states" (NCTE, 2009: p.6).

### The Study

As Robinson et al, (1989) have justifiably put it, without some form of evaluation, there is no way of assessing the effectiveness of a course. In India, in general and in Jammu & Kashmir in particular, there has been some attempts by school authorities to impart training to its teachers, but the systematic approach towards gauging the effectiveness of the same is conspicuously missing in such training programmes. Based on this contention, the study attempted to evaluate the effectiveness of the training programmes conducted by the DIET centers in the State of Jammu & Kashmir for teachers with the purpose of contributing to the establishment of a culture of programme evaluation in particular in the teacher education and in general in all sectors in the State. Specifically, the study aims to help the answer following research questions and hypothesis:

**Research Question 1:** What is the effect of training programme on the professional development of teacher trainees in terms of the immediate/affective and utility/actual learning transfer from the sample respondents?

*H1: The mean score on immediate learning and utility learning will be above average among school teachers.*

**Research Question 2:** Is the course programme properly designed and administered in terms of the location, timing, criteria used for the selection of trainees, the instructors etc? How do course participants react to it?

*H2: The mean score on dimensions of immediate learning will be above average among school teachers.*

**Research Question 3:** What improvement in learning and its transfer at the workplace are perceived by the Heads of course participants? Does there exist any difference between teacher trainees and headmaster perceptions on transfer of training and its dimensions?

*H3a: The mean score on perceived utility learning will be above average among headmasters.*

*H3b: There will be no difference on mean scores between teacher trainees and headmasters on perceived utility learning.*

**Research Question 4:** How much this study will contribute to the overall understanding of and need for programme evaluation?

This objective is achieved by drawing meaningful conclusions and inferences out of the analyzed data.

### Sample

Considering the peculiar nature of the study, the data for the study were collected from both teacher trainees, and the headmasters of the teacher trainee participating schools. For this purpose a list trainees who were undergoing training or has just completed the training was procured from State Institute of Education (SIE) involved in organizing training programmes for the teachers in the State of Jammu & Kashmir.

Three questionnaires were used to which suit the study objectives. These questionnaires were used to assess the first three levels of training evaluation propounded by Kirkpatrick (1959). Questionnaire 1st comprised of thirty two items falling on eight (8) predetermined dimensions/factors, aimed at measuring the immediate/affective responses of the teachers (Reaction level) towards training programs was distributed among 510 trainees out of which only 467 were received back thus forming a response rate of 91 percent at Time1.

Similarly, Questionnaire 2<sup>nd</sup> aimed at measuring application of skills i.e., Utility Learning comprised of 19 items falling on six (6) predetermined factors. At Time2, 467 questionnaires were distributed but only 352 were received back forming a response rate of 75 percent.

Self-report ratings as measures of job performance have been criticized by researchers (Velada et al., 2007). The present study included supervisors also as a measure on the grounds that research has considered them better indicators which



assess the financial and practical aspects of training effectiveness (Cascio, 1992). These assessments are considered simpler and less expensive for human resource managers and professionals (Velada et al., 2007). Therefore, Questionnaire 3<sup>rd</sup> was distributed to 42 Headmasters to measure their perception regarding application of skills by teacher trainees back at the work.

The responses collected were subjected to descriptive & inferential statistical tests with the most widely used SPSS (v.20) software.

**Table 4.1: Demographic profile of respondents**

Demographic Attribute	T1		T2		
	Frequency	Percentage (%)	Frequency	Percentage (%)	
Region	Jammu	142	30	77	22
	Kashmir	325	70	275	78
Gender	Male	260	56	212	60
	Female	207	44	140	40
Age Distribution	21-30	91	19	77	22
	31-40	170	36	123	35
	41-50	157	34	117	33
	51 & Above	49	11	35	10
	0-4	134	29	107	30
Teaching Experience	5-9	113	24	82	23
	10-14	119	25	88	25
	15 & Above	101	22	75	22

**T1= Data collected at Time 1; T2= Data collected at Time 2.**

### Immediate Learning & Satisfaction

From Table 4.3, in general, teacher trainees depict moderate level of satisfaction from the training programs revealed by the mean score of 3.42 on immediate learning. The findings showed that the mean score to General Satisfaction, Trainers & Training Usefulness were very high (i.e., above 3.5 on the 5-point Likert scale), suggesting that respondents were very satisfied with the training objectives, learning which it improved, its' existence, satisfied with the trainers of the programme and usefulness which it provides to teachers. The findings also showed that the mean scores to Attitude, Training Content, Training Facilities, Training Location and Training Organization were very low (i.e., below 3.5).

Research suggests that if trainees are happy with the training programme, react positively for its experiences, then learning may also exist among trainees. More importantly, if training improves learning, this will be depicted by transfer of skills back at the job. Therefore, the mean and correlation analysis presented in the table is expected to gauge the un-attended things largely not focused by authorities, trainers, as well as researchers.

**Table 4.3 Inter-relationship between dimensions of Immediate Learning**

Dimensions	M	SD	1	2	3	4	5	6	7	8
1. G. Satisfaction	3.68	.73	—							
2. Attitude	2.74	.71	.10*	—						
3. Trainers	3.62	.68	.66**	.02	—					
4. T. Usefulness	3.59	.78	.64**	.01	.73**	—				
5. T. Content	3.43	.73	.61**	.06	.74**	.70**	—			
6. T. Facilities	3.22	.83	.44**	.08	.49**	.39**	.49**	—		
7. Timeliness	3.36	.66	.27**	-.07	.31**	.31**	.38**	.24**	—	
8. T. Organization	3.38	.83	.57**	.02	.68**	.63**	.70**	.50**	.35**	—
Overall Total Score	3.42									

**Note:**\*\* Correlation significant at 0.01 level (2-tailed)

In fact, from the Table 4.3, the significant and strong to medium association exist between all dimensions except attitude. The highest association exists between training organization and all variable closely followed by general satisfaction and all variables except attitude.

Similarly, among the mean score of eight variables, mean score of seven (7) variables ranged from 3.22 to 3.74, except the one variable i.e., attitude, its mean score was far lower among all. Notably, in this study the construct attitude has been operationalized as “inherent liking or disliking towards training program”. Therefore, there is an inherent disliking of training, which maybe because of very low communication provided to teachers by authorities, trainers and supervisors regarding training programs importance. So the responsibility lies on all stakeholders to cultivate positive attitude towards training program.

Consequently, this necessitates to assess the item wise likert response on attitude dimension, which is expected to depict how many percent response rate attitude items have got, which ultimately improves our understanding why teacher trainees dislike training program.

4.3.1 Bar Graph

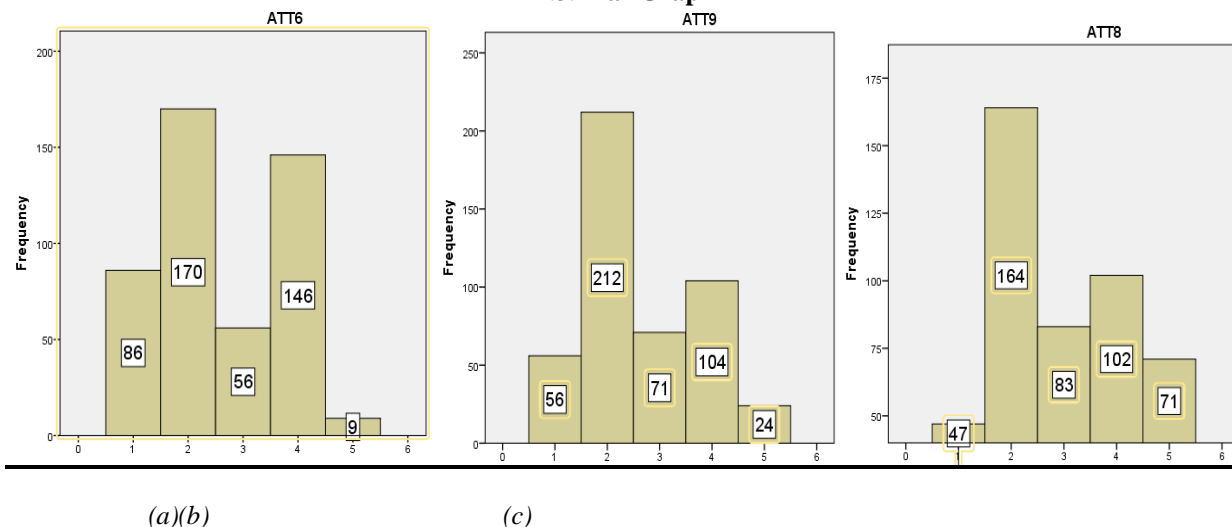


Table 4.3 and Bar graph 4.3.1 shows the teachers' attitude towards training program. For example in graph (a) 54.8% of teachers i.e., 256 trainees choose (Strongly Disagree to Disagree) agree that “Teaching skills learnt makes huge difference”. Similarly, in graph (b) 57.4% of teacher i.e., 268 trainees choose (Strongly Disagree to Disagree) that “The training was very easy to understand”. Also in graph (c) 211 teachers i.e., 45.2% trainees choose (Strongly Disagree to Disagree) that “Teaching skills are not inborn into the person”. These figures suggest why teachers do not like training because for them it has no relevance, they have kept in mind that training exercises reaps no benefits, and whatever they learn is from experience from the environment. Therefore, as suggested it is imperative on part of all stakeholders i.e., authorities, trainers and headmasters to make them aware how attending training program and learning from it is beneficial. Communication is not prevalent between the main three parties i.e., administrators, supervisors and teachers. The website of school education is not updated which is not helping to communicate about content, trainer and benefits. Although the training is designed to make it more understandable and meaningful but hardly trainees' liking towards training improves in a positive manner.

#### Utility Learning/Behavior (Trainees)

Examining the inter-relationship between Behavior dimensions and also comparisons by mean scores will help to gauge the un-attended things largely not focused by authorities, trainers, as well as researchers.

Table 4.6 Inter-relationship between dimensions of Behavior

Dimensions	M	SD	1	2	3	4	5	6
1. C. Management	3.43	.64	—					
2. S. Needs	3.62	.69	.43**	—				
3. S. Evaluation	3.42	.75	.22**	.34**	—			
4. M & S	3.48	.71	.33**	.31**	.49**	—		
5. Teaching	3.51	.66	.33**	.44**	.36**	.31**	—	
6. H Relations	3.41	.72	.47**	.35**	.18**	.35**	.34**	—

Note:\*\* Correlation significant at 0.01 level (2-tailed)

From the Table 4.6, the association between all dimensions of Behavior is statistically significant, which depicts that every variable contributes to the overall transfer of training very adequately. A significant and stronger association exists between Classroom management and among four (4) variables, closely followed by Teaching and Motivation & Satisfaction. However, a significant but weak positive relationship was observed between Student evaluation and Classroom management as well as its relationship with Human relations.

Similarly, the mean score of all variables ranged from 3.42 to 3.62, meaning thereby that teachers are applying skills honed through the training programmes moderately back at their respective schools. Therefore, the further analyses to mean score is not necessitated. However, the weak correlation which existed between some variables discussed above need some examination, so that the more about transfer of training is known.

**Table 4.7 Inter-relationship between Student Evaluation items and Classroom management items**

Items	CM1	CM2	CM10
SE1	.249**	.131**	.022
SE2	.047	.145**	.041
SE3	.178**	.240**	.029

*Note=\*\*Significant at .01 level (2-tailed)*

From the Table 4.7, correlation matrix depicts that the association between SE1-CM10, SE2-CM10 and SE3-CM10 is not only weak but also not statistically significant. The item SE1 explained as “The Teacher training programme has helped you in properly using various evaluation techniques/tests”, while Item CM10 explained as “The Teacher training programme has helped you in handling and improving classroom discipline”. This means that even after using various evaluation techniques its association with discipline in classroom has not been positive enough. Also, SE2 item explained as “The Teacher training programme has helped you in giving students proper class work assignments” and CM1 and CM10 items explained as “The Teacher training programme has helped you in proper management of class time”, “The Teacher training programme has helped you in handling and improving classroom discipline”. This observation explains that training has improved teachers in giving proper assignments to students but its association has not been much related to management of class time as well as classroom discipline. Similarly, item SE3 explained as “The Teacher training programme has helped you in Management of materials and equipment” and item CM10 as “The Teacher training programme has helped you in handling and improving classroom discipline”. Again, the association between management of materials and equipment has not been positive enough.

In other words, programmes are ‘top-down’ and have priorities set by the administration whilst they do not match the realities of the classroom and are irrelevant to teachers’ needs. Teacher ownership of programmes occurs infrequently.

#### Utility Learning/Behavior (Headmasters)

The data collected from teacher supervisors (i.e., Headmasters) can help us to see a clear image regarding perception of application of skills by teacher trainees.

**Table 4.8 Mean Comparison of transfer of training dimensions perceived by Headmasters and Teachers**

Dimensions	Headmasters N (M)		Teachers N (M)		p	CLES
<b>C. Management</b>	42	3.63	352	3.43	.04*	.60
<b>S. Needs</b>	42	3.64	352	3.62	.71	.50
<b>S. Evaluation</b>	42	3.64	352	3.42	.48	.53
<b>M &amp; S</b>	42	3.80	352	3.48	.00*	.62
<b>Teaching</b>	42	3.36	352	3.51	.17	.56
<b>Human Relations</b>	42	3.57	352	3.41	.17	.56
<b>Over all Behavior</b>	<b>3.57</b>		<b>3.48</b>			

*Note: \*Significant at .05 level (2-tailed); \*\*Common Language Effect Size (in %)*

The Table 4.8 shows mean comparisons on each perceived dimension of transfer of training between teachers and Headmasters made by independent sample *t* test. The mean difference on dimension Student needs, students evaluation,



teaching, human relations were found statistically insignificant i.e.,  $p > .05$ . In other words, the mean score differences on these four dimensions between headmasters and teachers are mere by chance or due to sampling error. Moreover, Common Language effect size indicates the probability that a randomly sampled Headmaster will perceive higher transfer than a randomly sampled teacher is 62% on Motivation & Satisfaction, 60% on Classroom management, 56% on Human relations and 50% on Student needs. While the probability that a randomly sampled teacher will perceive higher transfer than a randomly sampled headmaster is 56% on Teaching and 53% on Student evaluation.

In fact, the mean differences on dimension classroom management and on dimension motivation & satisfaction between headmasters and teachers is statistically significant.

The reasons for mean differences could be attributed to the fact as Headmasters' perceive that teachers are able to manage classrooms after attending training, but it is the teacher who personally knows what problems he/she face in classroom. In fact, teachers point that less number of teachers, and unprecedented hartals are the reason why after coming back to school from vacations, it becomes hard to manage the affairs of the classroom. Therefore, it is the responsibility of headmasters and authorities to support teachers on the job, to address problem which they believe exist, teachers need to be consulted at the school, so that there is an improvement in managing classroom.

Similarly, the mean differences on motivation and satisfaction which exists between headmasters and teachers' could be attributed to the problems faced by teachers even after attending training. Teachers show low motivation and satisfaction when there work is not recognized and receive low support at work (Holton, 1996). Notably, in the year 1996, Holton (1996) in his seminal work on transfer of training stressed that, there can be many intervening variables which effect transfer of training. In fact, motivation is one among them which Holton recognized as primary influencer. However, Holton (1996) also stressed that motivation itself is effected by many variables like trainee personality, job attitudes and intervention fulfillment, and called them as secondary influences. Besides personality, it is the situational factors (also called as work environment variables) like supervisor support, peer support, feedback, autonomy etc, which effect motivation, attitude and behavioral outcomes.

Therefore, it is necessary and binding upon school administration to provide supportive environment back at school, autonomy to improve results, feedback to teachers etc, so that increased level of motivation, improve transfer of training, which could be shown by teachers in terms of skill maintenance and generalization.

#### Training Effectiveness in terms of transfer of training Dimension Wise (Headmasters)

This section seek to observe each and every construct and its comparison thoroughly, which lead to explain the underlying phenomenon thoroughly. Similarly, examining the inter-relationship between Behavior dimensions and also comparisons by mean scores help to gauge the things largely not focused by authorities, trainers, as well as researchers.

**Table 4.36 Inter-relationship between dimensions of Behavior (Headmasters)**

Dimensions	M	SD	1	2	3	4	5	6
1.C. Management	3.63	.456	—					
2.Student Needs	3.64	.420	.35*	—				
3.S. Evaluation	3.34	.597	.54**	.30*	—			
4.M & S	3.80	.736	.30*	.39*	.33*	—		
5.Teaching	3.36	.673	.35*	.41**	.43**	.34*	—	
6.Human Relations	3.57	.580	.41**	.33*	.34*	.47**	.36*	—
<i>Note: ** Correlation significant at 0.01 level (2-tailed); * Correlation significant at 0.01 level (2-tailed)</i>								

From the Table 4.36, it can be observed that there exists a significant and moderate level of association between all variables of transfer of training. It shows that each & every variable contributes positively to transfer of training. Moreover, the mean score ranged from 3.34 to 3.80 depicting that Headmasters perceive moderate level of transfer among teacher trainees. These results are consistent with earlier results observed from the data collected from teachers. This shows how much teachers and supervisor's perceptions are in line with each other about transfer of skills back at school.

## CONCLUSION & FUTURE RESEARCH SUGGESTIONS

As with any research, careful interpretation is required and there needs to be a deliberation given to the limits and restraints of its findings. The present study revealed that much can be done to improve satisfaction and learning of teacher trainees from moderate to high levels because these cost heavily in terms of time and money. Therefore, the more improved the training programme the better the results. Notably, the lectures delivered at training sessions are not delivered by professional experts but rather by generalists (a.k.a Resource Persons) duly selected by competent authority. Unfortunately, the trainers discouraging remarks at training sessions towards teacher trainees' is de-motivating factor. The lack of professionalism on part of Resource Persons is the reason for low level involvement of trainees'. Infact, before conducting training the teacher trainees should be well informed regarding the sessions to be chaired by professionals & trainers which will impress an image of professionalism among teachers. In addition, the communication regarding the importance and the benefits associated in attending training programmes will subsequently add a value. More importantly, before and after training the suggestion boxes can be used to help identify the weaknesses & flaws associated with training programme. If it is not possible, then through official website it can be done. But, unfortunately, the website and the portal is not updated and should be updated so that information even regarding the training content is also available.

Notably, it was observed during data collection and subsequently after interacting with trainees' that the arrangements and the location of training programme sessions was not well organized. Infact, the hot and cold facilities, refreshment's and breaks (especially in rural areas of Kashmir) were not up to standards. This inhibits the learning process because environment must be conducive and compelling for learning. In other words, there should be well organized system at the disposal of DIET, where the teacher trainees are mentally as well as physically involved.

Training programmes should be designed visa-visa with the realities existing at the school environment. For example, the special customized training programme for schools where problems like student indiscipline, interpersonal relations among teachers, lack of motivation among teachers, and the like exist.

There should exist a link between School, College, and University to deal with grave issues like low literacy rates, low pass-out rate, high drop-out rate. In this context, all stakeholders should be invited before designing training programmes for their suggestions and opinions. The lack of co-ordination between stakeholders on one hand, and the increased number of training programmes at other hand, cannot be deemed enough to achieve the main objective.

There is a need to evaluate the efficacy of funding short-term training projects that have little follow-through. The value of sustained long-term in-service programmes that provide follow-up has been established. Transfer takes time to develop and needs to be nurtured over a period of time.

More research is needed, however. For example, Timperley, Wilson, Barrar and Fung (2007) noted there are unknowns about teacher learning and the students' responses to the new ideas and the changes in teaching behaviours. What is required is a clearer understanding of teacher professional development encompassing a more integrated perspective of teacher learning, motivation and the transfer of training (McDonald, 2010).

## REFERENCES

- [1] Aguinis, H., & Kraiger, K. (2009). Benefits of training and development for individuals and teams, organizations, and society. *Annual review of psychology*, 60, 451-474.
- [2] Alliger, G. M., & Janak, E. A. (1989). Kirkpatrick's levels of training criteria: Thirty years later. *Personnel psychology*, 42(2), 331-342.
- [3] Anderson, L. M., Evertson, C. M., & Brophy, J. E. (1979). An experimental study of effective teaching in first-grade reading groups. *The Elementary School Journal*, 79(4), 193-223.
- [4] Bell, B., & Gilbert, J. (1996). *Teacher development: A model from science education*. London: Falmer Press.
- [5] Brophy, J. (1978). Interactions between learner characteristics and optimal instruction. *Social psychology of education: Theory and research*. Washington, DC: Hemisphere.
- [6] Brophy, J., & Evertson, C. M. (1978). Context variables in teaching 1. *Educational Psychologist*, 12(3), 310-316.
- [7] Burke, L. A., & Hutchins, H. M. (2007). Training transfer: An integrative literature review. *Human resource development review*, 6(3), 263-296.
- [8] Bushnell, D. S. (1990). Input, process, output: A model for evaluating training. *Training & Development Journal*, 44(3), 41-44.
- [9] Carnevale, A. P., & Schulz, E. R. (1990). Return on Investment: Accounting for Training. *Training and Development journal*, 44(7).
- [10] Cascio, W. F. (1991). *Costing human resources*. Cincinnati: South-Western Educational Publishing.
- [11] Dwyer, C. A., & Villegas, A. M. (1993). Guiding conceptions and assessment principles for The Praxis Series: Professional assessments for beginning teachers™. *ETS Research Report Series*, 1993(1), i-12.

- [12] Fitz-enz, J. (1994). Proving the value of training. *The training and development sourcebook*, 2, 209-215.
- [13] Giangreco, A., Sebastiano, A., & Peccei, R. (2009). Trainees' reactions to training: an analysis of the factors affecting overall satisfaction with training. *The international journal of human resource management*, 20(1), 96-111.
- [14] Glatthorn, A. A., & Fox, L. E. (1996). *Quality Teaching through Professional Development. Principals Taking Action Series*. Corwin Press, Inc., 2455 Teller Road, Thousand Oaks, CA 91320-2218 (paperback: ISBN-0-8039-6273-8; hardcover: ISBN-0-8039-6274-6)..
- [15] Goldstein, I. L. (1978). The pursuit of validity in the evaluation of training programs. *Human Factors: The Journal of the Human Factors and Ergonomics Society*, 20(2), 131-144.
- [16] Goldstein, I. L. (1993). Training in organizations: Needs assessment, development, and evaluation. Thomson Brooks/Cole Publishing Co.
- [17] Good, T. L., & Grouws, D. A. (1977). Teaching Effects: A Process-Product Study in Fourth Grade Mathematics Classrooms. *Journal of Teacher Education*, 28(3), 49-54.
- [18] Guskey, T. R. (2000). Evaluating professional development. Thousand Oaks, CA: Corwin Press.
- [19] Guskey, T. R. (2009). Closing the knowledge gap on effective professional development. *Educational horizons*, 87(4), 224-233.
- [20] Holton, E. F. (1996). The flawed four-level evaluation model. *Human resource development quarterly*, 7(1), 5-21.
- [21] <http://twocircles.net/2015jun17/1434531967.html#.V3dKwNJ97IU>
- [22] <http://www.2013-State of the Industry Report-ASTD>
- [23] Impact Measurement Centre (Firm). (2005). Measuring the impact of training and development in the workplace.
- [24] Kirch, W. (2008). *Encyclopedia of public health*. New York: Springer.
- [25] Kirkpatrick, D. L. (1959). Techniques for evaluation training programs. *Journal of the American Society of Training Directors*, 13, 21-26.
- [26] Kirkpatrick, D.L. and Kirkpatrick, J.D. (2008), *Evaluating Training Programs: The Four Levels*, Berrett-Kohler, San Francisco, CA.
- [27] Kraiger, K., Ford, J. K., & Salas, E. (1993). Application of cognitive, skill-based, and affective theories of learning outcomes to new methods of training evaluation. *Journal of applied psychology*, 78(2), 311.
- [28] Lave, J. (1988). *Cognition in practice*. Cambridge, UK: Cambridge University Press.
- [29] Magolda, M. (1996). Epistemological development in graduate and professional education. *Review of Higher Education*, 19(3), 283-304.
- [30] Merwin, S., & Pike, R. W. (1992). Evaluation: 10 significant ways for measuring and improving training impact. Jossey-Bass/Pfeiffer.
- [31] Muraskin, L. D. (1993). Understanding Evaluation: The Way to Better Prevention Programs.
- [32] National Policy on Education, (1986) (As modified in 1992)" (PDF). HRD Ministry. Retrieved 3 March 2015.
- [33] Patrick, J. (1992). *Training: Research and practice*. Academic Press.
- [34] Rao, T. V. (1990). The HRD Missionary: Role and Function of HRD Managers and HRD Departments.
- [35] Salas, E., Tannenbaum, S. I., Kraiger, K., & Smith-Jentsch, K. A. (2012). The science of training and development in organizations: What matters in practice. *Psychological science in the public interest*, 13(2), 74-101.
- [36] Scriven, M. (2003). Evaluation theory and metatheory. In *International handbook of educational evaluation* (pp. 15-30). Springer Netherlands.
- [37] Scriven. (1999). Proceedings from American Evaluation Conference: The Territory Ahead. Orlando, Florida.
- [38] Slick, G. A. (1995). *Making the Difference for Teachers: The Field Experience in Actual Practice*. Corwin Press, Inc., 2455 Teller Road, Thousand Oaks, CA 91320-2218 (paperback: ISBN-0-8039-6211-8, \$18.95; hardbound: ISBN-0-8039-6210-X).
- [39] Smith, M. C., & Downs, S. (1975). Trainability assessments for apprentice selection in shipbuilding. *Journal of Occupational Psychology*, 48(1), 39-43.
- [40] Swanson, R. A. (1998). Demonstrating the financial benefit of human resource development: Status and update on the theory and practice. *Human Resource Development Quarterly*, 9(3), 285.
- [41] Tella, A. (1998). An Investigation into Poor Performance and Attitude of Secondary School Students towards Mathematics in Oyo State, Nigeria. *Unpublished B. Ed. Project University of Ibadan, Ibadan*.
- [42] Trochim, W. M. (2001). *Research methods knowledge base* (2nd ed.). Cincinnati, OH: Atomic Dog Pub.
- [43] Tyler, R. W. (2013). *Basic principles of curriculum and instruction*. University of Chicago press.
- [44] Udai, P., & Rao, T. V. (1981). Designing and managing human resource systems. *ISBN: 81-204-1610, 4*.
- [45] Velada, R., Caetano, A., Michel, J. W., Lyons, B. D., & Kavanagh, M. J. (2007). The effects of training design, individual characteristics and work environment on transfer of training. *International Journal of Training and Development*, 11(4), 282-294.
- [46] Wong, P. M., & Wong, C. S. (2003). The Evaluation of a Teacher Training Programme in School Management The Case of Hong Kong. *Educational Management & Administration*, 31(4), 385-401.
- [47] Worthen, B. R., & Sanders, J. R. (1987). Educational evaluation: Alternative approaches and practical guidelines.
- [48] [www.teindia.nic.in/Files/jrm/JRM\\_Reports/FINAL\\_JRM\\_28-4-2013-J&K.pdf](http://www.teindia.nic.in/Files/jrm/JRM_Reports/FINAL_JRM_28-4-2013-J&K.pdf)
- [49] Zinovieff, M. A., & Rotem, A. (2008). Review and analysis of training impact evaluation methods, and proposed measures to support a United Nations system fellowships evaluation framework. *WHO's Department of Human Resources for Health, Geneva*, 20.