

Impact of Critical Thinking for Transformative Learning (CTTL) Programme on Elementary Teacher Trainees

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Abstract: Thinking played an important role in human life. All problems and their solution are the result of thinking. The roots of thinking are in the existential reality of which human being on this earth are continuously exploring through various ways. This thinking process occur in oneself and resulting on the basis of one's belief and value system about self, family and society etc. Observing the need of the society one may get the skill and understanding to make confident oneself. An intervention was carried out on elementary teacher trainees of DIET, Daryaganj through the content which was logical, practicable and universal by the name of 'Critical Thinking for Transformative Learning'. A pre-test was taken on the perception and belief system on various issues about self, family and society then one year long intervention through the regular conversational classes, Focus group discussion and in morning assembly it was done. After one year long Post-test was administered. The data was collected from the pre and posttest taken in the beginning and last respectively. The data analyses was conducted keeping in mind the objective of the study. A significant behavioral change was observed among the DIET trainees and the logically acceptance of the values system also observed in the study.

Keywords: CTTL, Elementary Teacher Trainees, logical, Practicable.

1. Introduction

In the present context, our mainstream education system has continued to become unilateral in favor of skill generation and information enrichment and the value dimension has been languishing. Even though, the importance of value education is observed by common human being and also repeatedly highlighted at various platforms. Various commissions and expert committees on education also stress on this issue. Although various methodologies and models for value education have yet to find a rightful place in our education system. Education in the true sense should empower individuals to clarify their values to enable them to take conscious and deliberate decisions, taking into consideration the consequences of their actions, to choose the way of peace rather than violence; to enable them to be makers of peace rather than

only consumers of peace.' (N.C.F-2005). Overall purpose of education is to enable a human being to live a fulfilling life, in harmony with oneself and with family, society and nature. Hence, it becomes the responsibility of educators to enable the resolution of these issues, so that human society can achieve the cherished goal. In light of various commission and policy on education, it becomes essential to find out what is of value, or what is really valuable to a human being? While technology is an important human Endeavour, it is only a means to achieve what is considered 'valuable' for human beings in an effective and efficient manner. It is thus not within the scope of technology to decide 'what is valuable' to a human being. The subject that deals with 'what is of value', or 'what is valuable to a human being' is called 'value education'. Values thus provide the basis for all our actions and there is an essential complementarily between values and skills which needs to be ensured in any education system

We have noticed a tangible change in the thinking of students, in terms of their vision regarding family, society and about life-goals, improvement in human relationships, selfconfidence, commitment to learning, feeling more responsible towards decision making and behaviour. The effects of selfexploration through critical thinking and transforming learning are found to be very rewarding. Trainees have benefited by acquiring a better ability to relate to with real life and evaluating the relevance of various academic and social inputs, in addition to benefiting in their own personal lives. The critical thinking is the analysis about value or belief system to form a self judgment for a confident human being.

Need of the study: Modern Education makes a person more rational and is supposed to give us a framework for evaluation of our self, family, ecology, society, Nation and the entire human society. Each individual should learn his/her role in all of the above. This requires that we evaluate our self, family, ecology, society, nation and world without biases. Absence of this makes opinion-less, docile and passive individuals, who later go on to make a weak society. 'Critical Thinking' is

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learning to think without bias. It is a logically reasoned judgment, where one thinks in the light of knowing. All teachers are expected to develop 'Critical Thinking' among their students. This is how teachers and education contribute to building a strong society. Teachers obviously cannot impart something they themselves do not have. Thus arises the need to develop 'Critical Thinking' among teachers. It is also important that this tool of 'Critical Thinking' be used for making positive change in ourselves rather than learning to blame others. Presently, we are facing a problem of the younger generation using the ability to analyze logically on everyone around them and not on themselves. This is making this generation irresponsible, opinioned, rebellious and directionless. Thus the tool of 'Critical Thinking' should be used to introspect and transform oneself. Without first transforming oneself all efforts to change the world are counterproductive and lead to unsatisfied individuals, broken homes, chaotic societies, ecological imbalances and disharmonious world. Education is the best way to facilitate this transformation from internal chaos to internal harmony. In other words, 'Transformative Learning' is the purpose of education - where in an individual takes every opportunity to learn with awareness that the learning translates into a positive change within (in oneself) and without (in society). These individuals living in human consciousness will form prosperous families, undivided society and sustainable and harmonious world.

2. Objectives of the Study

- To study the understanding of Value Education among Trainees.
- To study the impact of CTTL programme on the perception of trainees about self, family and society.
- To analyses and observe the behavioral change in the trainees after attending CTTL classes.

3. Methodology of the Study

The purpose of this study is to evaluate the impact of CTTL (Critical Thinking and Transformative Learning) on Trainees of DIET, Daryaganj. The research was designed in both qualitative and quantitative paradigms. This study was based on survey, observations and Focus Group Discussion (FGD). The design and method of the study was developed to generate the required data to address the purpose of the study. A pre-test was conducted before intervening through the content of critical thinking and transformative learning (CTTL) in classroom, assembly and group discussion. After completion of one year a post test was conducted on the same group and focus group discussion and observation by faculty also taken for consideration.

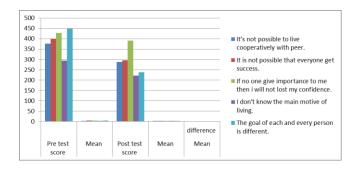
- *Limitations of the study*: The study is restricted to first year trainees (2018-20) of two year Diploma in Elementary Education course conducted in district Institute of Education and Training, Daryaganj, New Delhi.
- *Tools used:* Pre-test and post-test questionnaire prepared which were based on different aspect of

CTTL paper i.e. self, family and society and the comparison with current knowledge system and way of living. Questionnaire was vetted by experts of this philosophy on which this whole content is based. 25 items/questions were finalized after validity.

- *Sample:* The sample for the present study which aims to know the effectiveness of CTTL classes was 110 Pre service Trainees of DIET Daryaganj of session 2018-20.
- *Procedure of Data Collection:* Data was collected through pre test and post test along with observation and personal interaction by faculty (researcher). Pre test was administered on D.El.Ed first year trainees before intervening through workshop based on CTTL content and the classes throughout the year.
- Analysis and Interpretations of data: The data and observation were collected along with the feedback noted in group discussion is tabulated for analysis purpose. Keeping in mind the objectives of the study statements were rearranged for the purpose. Therefore different table were made for a analysis and interpretation of the data.

Table 1

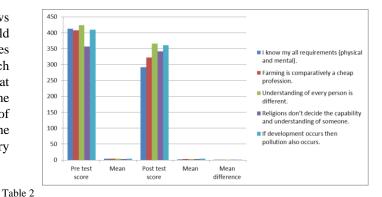
S.no	Statement	Pre	Mean	Post	Mean	Mean
		test		test		difference
		score		score		
1.	It's not possible to live cooperatively with peer.	377	3.42	288	2.61	0.81
2.	It is not possible that everyone get success.	398	3.61	295	2.68	0.93
3.	If no one give importance to me then i will not lost my confidence.	427	3.88	391	3.55	0.33
4.	I don't know the main motive of living.	294	2.67	221	2.00	0.67
5.	The goal of each and every person	448	4.07	238	2.16	1.91



is different.

Interpretation: From the above table it is depicted that there

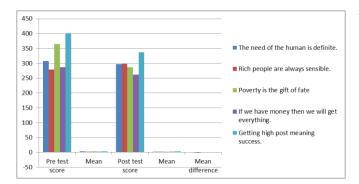
is significant decrease in all these points which actually shows the positive effect .earlier students used to think that they could live cooperate as we can see the decrement of 2.68 it clarifies that now trainees don't think that our aim cannot same to each other even intervention the trainees started to think that everyone get success in their life. Their perspective become more broaden that they are able to think about their motive of life. Attention of trainees shifted from materialistic world to the essentials and they believe that not only rich people but every person in this world can get success.



Analysis and interpretation on the statement regarding understanding								
S. no	Statement	Pre test score	Mean	Post test score	Mean	Mean difference		
6.	The need of the human is definite.	307	2.79	297	2.70	0.09		
7.	Rich people are always sensible.	279	2.54	298	2.71	- 0.17		
8.	Poverty is the gift of fate	364	3.31	287	2.61	0.70		
9.	If we have money then we will get everything.	287	2.61	262	2.38	0.23		
10.	Getting high post meaning success.	401	3.65	337	3.03	0.62		

Table 3
Analysis and interpretation on the statement regarding their needs

S no	Statement	Pre test	Mean	Post test	Mean	Mean difference
		score		score		
11	I know my all requirements (physical and mental).	413	3.75	292	2.65	1.10
12	Farming is comparatively a cheap profession.	407	3.70	322	2.93	0.77
13	Understanding of every person is different.	424	3.85	366	3.33	0.52
14	Religions don't decide the capability and understanding of someone.	357	3.25	341	3.10	0.15
15	If development occurs then pollution also occurs.	409	3.72	361	3.71	0.01

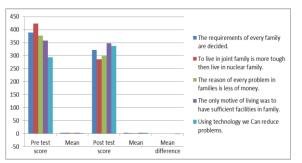


Interpretation: Above table depicts that students shifted their understanding to the materialistic desires to the valuable things in Life. +0.09 difference shows that trainees are not very much clear about the human need. Students start taking their need as a definite in terms of life and to fulfil our life. The difference of +0.70 on the statement that the poverty is a gift of fate shows that they understand the reality. There is significant decrease -1.19 which proves that students started to broaden their thinking and they realize that rich people are also sensible and they were sensible about the position. +0.23 difference in the question if they have money they will get everything means they were disagreed about it. Interpretation: Above table reveals that there is difference between pre and post test and students know about their Table 4

Analysis and interpretation on the statement regarding family

S.	Statement	Pre	Mean	Post	Mean	Mean
no		test		test		difference
		score		score		
16	The	389	3.54	322	2.93	0.61
	requirements of every family					
	are decided.					
17	To live in joint	423	3.85	286	2.60	1.25
	family is more					
	tough then live in nuclear					
	family.					
18	The reason of	377	3.43	299	2.72	0.71
	every problem					
	in families is					
	less of money.					
19	The only	358	3.25	347	3.15	0.10
	motive of living was to					
	have sufficient					
	facilities in					
	family.					
20	Using	294	2.67	337	3.06	- 0.39
	technology we					
	Can reduce					
	problems.					

requirements but differences show that they were much aware about most of the physical need. There is decrement of 0.52 it means they understand the value of individual difference that every individual have different opinions according to their understanding And students started to think on broader perspective and different in pre and post is 0.77 shows that now students realise that no profession is Superior or inferior even farming is a good profession and it is healthy in terms of development. Most of the time. Infrastructural activates leads to the pollution so we need to live natural.



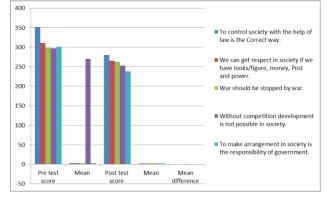
Interpretation: Above table reveals that difference in pre and post test is 0.66 means the trainees started to realize the importance of community and harmonious relations among others and they accepted that living in the joint family is not quite it's all about our behaviour and intentions towards them. If a person's intention is good then it's quite easy and pleasurable to live with family and others and by using different technology we can reduce our problems.

 Table 5

 Analysis and interpretation on the statement regarding society

S.no	Statement	Pre	Mean	Post	Mean	Mean
		test		test		difference
		score		score		
21	To control society with the help of law is the Correct way.	352	3.20	280	2.55	0.65
27	We can get respect in society if we have looks/figure, money, Post and power.	311	2.83	265	2.41	0.42
29	War should be stopped by war.	299	2.72	263	2.9	- 0.18
33	Without competition development is not possible in society.	297	270	253	2.30	0.40
37	To make arrangement in society is the responsibility of government.	301	2.74	238	2.16	0.58

Interpretation: Data in above table reveals that the trainees understand and show shift in mean difference that is there was is a little shifted in their understanding that we are the responsible people who have to Set arrangement not only government are responsible for this. The difference between pre and post test is +0.58 which shows that trainees start realising their role in the society that we could not name others for our miseries. We are the one who select government means we are the part of government we can't exclude us from government and we have to work for universal motive not for money only.



4. Discussion

The goal of living and the perceptions about various aspects of life plays an important role so we need to explore the nature of which we are the part of that. Logical reasoning, critically thinking is the tool to explore the reality in a scientific manner. Present content is discuss to find out the reality of the thinking or perception about self/family/ society and to make understanding the need of human being or him/herself so the we can achieved the definite goal and fulfill our needs and can live in family, society and nature in cyclic process without any damage. From all interpretation of the data in above tables we can conclude that this CTTL content gives positive feedback from trainees. It helps in shifting the students way of thinking and directed on the basis of several aspect of a particular topic before starting this programme the students were not able to evaluate their need, values and beliefs after providing link between their peer, family and society as an existential reality. Students start understanding that the goal of our life is more than earning Money and fulfil materialistic desires. The CTTL sessions were able to sensitise the students that they should have to work on values which is the most important factor to make their Life more meaningful. Life is not only the individual identity it can only understand through the relationship, an individual share with the nature and among their community. These sessions brings attitudinal or behavioural changes in the students they will more concern for values and the way they behave with others shows that they also understand that a person filled with values will be more successful rather than loitering around the materialistic world found this CTTL content provide us the way we should live and think and the major objectives we should live for continuation of this content will develop or inculcate good values and understanding about life among students.

Statement regarding to society reflects that most of the trainees understand and reflect their learning according to the laws of nature. As they self observed and evaluate the things. Role and importance of relationship with parents, peer, and neighbour are very important to our live. No individual can survive happily. There was process of thinking towards all dimensions in society like religion, relation, physical and mental need. Opinion of trainees on the characteristic of space was also observed and somewhat it was reflect on their thinking. Most of the trainees started to think critically on various issue and thought shared in assembly.

The belief system was played important role in thinking and decision making on oneself. There are various belief systems in our society. These should be evaluated on the basis of universal order. CTTL content classifying the human needs on the basis of physical and nonphysical it easy to understand the reality after logical reasoning. Trainees are reflecting and discussing on belief system and evaluate these on the basis of human centric thinking. Response collected on the nature, family and belief system was analysis and compares it with the CTTL content.

5. Findings and Suggestions

On the basis of the research study of the effect of Critical Thinking and Transformative Learning (CTTL) programme on DIET trainees, on the basis of above discussions, following findings were drawn:

- Trainees have begun pondering upon various values like trust, gratitude and respect in existential design.
- Trainees have initiated thinking critically regarding success and also differentiated it in terms of existential order viz materialistically and utilitarian.
- Basic physical needs, values and feelings were understand by trainees according to the universal concept.
- Their concept of richness for the collection of physical goods and money is very clear-cut it is evaluated and distinguished between physical and mental need and the way to fulfill them.

- Decision making and problem solving on the issues related to family and society has increased significantly among the trainees.
- Universal and logical conclusion on various issues has increased among trainees.
- There problem was find on the discussion in peer group as they have different opinions.
- There is a paradigm shift in thought process of trainees regarding various words and their meaning by knowing them in universal order.
- Trainees have begun to think and reflect on integration of nature, society, family and self by emphasizing human consciousness.

6. Conclusion

This paper represents an overview of Impact of Critical Thinking for Transformative Learning (CTTL) Programme on Elementary Teacher Trainees.

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