# IN- SERVICE TEACHER TRAINEE'S PERCEPTION TOWARDS ROLE OF DIETS IN ENHANCING KNOWLEDGE AND SKILLS AMONG ELEMENTARY SCHOOL TEACHERS OF UPPER ASSAM

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Abstract: District Institute of Education and Training (DIETs) is a teacher training institution for the elementary level. It includes in-service and pre-service programmes both. The main purpose of these programmes are reform the teachers' behaviour, enhancing knowledge and skills, create awareness and responsibilities of the teacher, create suitable environment by facilitating new innovations etc. Trainees, teacher educators' perception on enhancing knowledge and skills due to training are important aspects for research. So the main purpose of this paper is to study the inservice teacher trainees' perception towards role of DIETs in enhancing knowledge and skills among elementary school teachers.

Keywords: DIETs, Perception, Knowledge, Skills, Trainees, Teachers, Upper Assam.

# **DIETs: Its Background:**

The Education Commission (1964-66) had observed that all the factors that influence the quality of education, the quality, competence and character of the teachers are undoubtedly the most significance. But these in turn depends substantially on the quality of training and other support provided to them until adoption of NPE, this support in the area of Elementary Education was being provided largely at National and State level only by Institution like NCERT, NIEPA & SCERTs. Below the state level there are Elementary Teacher Education Institutions but their activities were confined mostly to Pre-Service teacher education. Thus their roles were limited. There were larger problems like outdated teaching practice & course of study.

By the time of adoption of NPE (1986), Elementary and Adult Education System were too vast to be adequately supported by National and State level agencies alone. Therefore NPE (1986) accordingly envisaged addition of third district level tier to support the system in the shape of DIETs in every district of the country .So, on the basis of this recommendation, in 1988-89 for the purpose of development of primary education and in order to success adult education scheme started to open DIET in each district. With the introduction of this third layer of support system expectation would be of wider quantitative and hopefully qualitative coverage as DIETs would be closer to the field and therefore more alive to the problems and needs. In our Assam DIETs placed

under the administrative control of SCERT.SCERT is responsible for formation and implementation and management of Elementary Teacher Education Curriculum in the state. According to the proposal of NPE and POA ,DIETs were established in to three stages :first was 1989-1990, second was 1994- 95 and thirdly 1995-96. Now there are 18 DIETs which provides a) Primary In-service for six months duration with intake of 1500 and b) D El Ed pre service for duration of 2 years with intake of 600.

# Rationale of the study:

Quality Education is a great demand in the present century. The quality of education depends upon teacher's efforts, responsibility, ethics & accountability towards their profession and students. School should have a sufficient number of trained teachers, receiving good quality in pre-service and in-service training with built in components on gender sensitivity, non discrimination and human rights. In the area of teacher education, researchers have found that senior secondary school teachers have to attend the refresher courses for improving quality of their teaching.

Budi, Mardiana, & Wate (2017) added that teachers' competency and achievement motivation are the driving factors for teachers' creativity. Chand (2015) also found in his research study that creativity, life skill education, value oriented education, health education and ICT based teaching are important in Teacher Education. Jeba (2005) manifested that between teaching competency and mental health of student teachers has a significant correlation.

Simonsen, Brier, & Gage (2014) have emphasized that classroom management is very essential in pre-service teacher training. Simonsen, Brier, & Gage (2014) indicate that although effective classroom management practices have been identified, a significant gap exists between the effective classroom management research base and requirement for teacher training. As a result, many pre-service teachers may not be prepared to effectively manage student behaviour upon completion of a teacher preparation program due to lack of exposure to classroom management content.

In-service as well as pre-service teacher training programme improve the knowledge and skills among teacher trainees (Chand, 2015), Bajpai (2013) explored that creativity and life skills are highly important in teacher education for bringing about improvement and quality and in-service teacher training practices developed useful knowledge and skills in the specific area. Merger & Lane (2012) explored that pre-service teachers need to teach value oriented education effectively and to be skilled in recognising and responding to student diversity.

**Bondu & Viswanathappa** (2007) revealed that there was no significant difference in teachers' competency of primary school teachers with reference to background variables. **Panda** (1997) has revealed that it is the best effort and constraint of MHRD that organise pre-service Teacher Training Programmes (PSTTP) for elementary school teachers and In-Service Teacher Training Programmes (ISTTP).

From the above researches it is clear that trainee teachers' attitude towards effectiveness of DIETs, different programmes and functions of DIETs as well as effectiveness of teaching are more important elements to bring quality in teacher training. If in-service teachers do not have favourable and the desirable perception towards development of knowledge and skills in training period they cannot provide positive academic as well as socio emotional climate in classroom situations and cannot assess students' potentialities in a righteous manner. Thus, the investigator has thought to study the role of DIET in development of knowledge and skills among in-service elementary school teacher. The investigator has selected four DIET colleges because these four DIET colleges are central education hubs for bringing qualitative teacher trainees in Upper Assam. There is no research study was found in this area in connection with trainees' perception on effectiveness of DIETs, it's programmes, functions, enhancing knowledge and skills. So, the researcher has decided to investigate on perception of in-service teacher trainees' towards role of DIETs in enhancing knowledge and skills among in-service elementary school teachers. Hence the investigator has stated the problem as given below- **Statement of the problem**:

IN-SERVICE TEACHER TRAINEES' PERCEPTION TOWARDS ROLE OF DIETS IN ENHANCING KNOWLEDGE AND SKILLS AMONG ELEMENTARY SCHOOL TEACHERS OF UPPER ASSAM.

### **Operational term used:**

- 1) **Perception**: In the present study Perception is defined as organization, identification and interpretation of sensory information on teaching, life skills, curriculum, co curriculum, TLM, ICT, evaluation etc.
- 2) **Trainees:** A person who is learning and practising the skills at the period of training.
- 3) **Knowledge**: In the present study knowledge implies facts, information and skill acquired through training.
- 4) **Skills:** Group of acts or behaviours intended to facilitate students learning.

# **Objectives of the study:**

- 1)To study the in-service trainees perspective towards role of DIETs in enhancing knowledge and skills among the in-service elementary school teachers of Upper Assam with respect to gender.
- 2) To study the in-service trainees perspective towards role of DIETs in enhancing knowledge and skills among the in-service elementary school teachers of Upper Assam with respect to locality.
- 3)To study the in-service trainees perspective towards role of DIETs in enhancing knowledge and skills among the in-service elementary school teachers of Upper Assam with respect to caste.

## **Hypotheses of the study:**

- 1. There is no significant difference in in-service teacher trainee's perception on role of DIETs in enhancing knowledge and skills among in-service elementary school teachers in Upper Assam with regard to gender.
- 2. There is no significant difference in in-service teacher trainee's perception on role of DIETs in enhancing knowledge and skills among in-service elementary school teachers in Upper Assam with regard to locality.
- 3) There is no significant difference in in-service teacher trainee's perception on role of DIETs in enhancing knowledge and skills among in-service elementary school teachers in Upper Assam with regard to among different caste.

# **Population:**

The target population of the present study consisted of all in-service teacher trainees of four DIET colleges of Upper Assam.

### Sample:

In this study a small number of samples were selected as representatives of the target population. This sampling procedure is concerned with simple random sample. One hundred (100) in- service teacher trainees were drawn as the sample for the study of four DIET colleges in Upper Assam.

# Tools used in the study:

Perception Scale constructed and developed by the investigator was used in order to assess perception of in-service teacher trainees towards role of DIETs in enhancing knowledge and skills among elementary school teacher. The attitude scale was consisted of 37 statements. It consists eight dimensions namely teaching, curricular activities, co curricular activities, teaching methods, teaching skills, life skills, evaluation and TLM and ICT.

### **Reliability:**

In the present investigation, the investigator found out reliability by employing the test - retest method. The comparison of responses of an alternate form with the original form of questionnaire is also made to estimate the reliability.

# Validity:

It possess face validity and content validity

## Data analysis and interpretation:

The investigator used Mean, SD, t test and F test as statistical techniques in order to analyze and interpretation of data for the purpose of the study.

Objective-1: To study the in-service teachers trainees' perspective towards role of DIETs in enhancing knowledge and skills among the in-service elementary school teachers of Upper Assam with respect to gender.

Ho-1: There is no significant difference in in-service elementary school teachers' perspective towards role of DIETs in enhancing knowledge and skills among in-service elementary school teachers in Upper Assam with regard to gender.

**Table-1:** shows Mean, SD, D, SEd and t-values for Curricular activities, Co curricular activities, Teaching Methods, Teaching skills, Life Skills, Evaluation, Teaching Learning materials and Information and Communication Technology.

From the table -

1, it is clear that, t-value (0.68) with respect to in-service teacher trainees' perspective towards role of DIETs in enhancing knowledge and skills among in-service elementary school teachers of Upper Assam  $(M_1=22.73 \text{ SD}_1=3.03; M_2=22.33, \text{SD}_2=2.91, D=.40, \text{SEd}=0.59, df=98) \text{ P} \le 0.01 \text{is not}$ significant. It means that gender does not differ in in-service teacher trainees' perspective towards role of DIETs in enhancing knowledge and skills among in-service elementary school teachers in Curricular Activities (CA). From the mean values, it is clear that male in-service teacher trainees'

SL NO	Dimensio ns	Male (N1=45)		Female (N2=55)		D= M1-M2	SEd	t value
		M1	SD1	M2	SD2			
8.	CA	22.73	3.03	22.33	2.91	.40	0.59	.68 @
2.	CoA	8.41	2.30	9.15	2.02	0.74	0.5	1.48@
<b>3</b> 0.	TM	12.28	1.76	12.17	1.96	.11	.37	.30@
41.	TS	9.8	2.13	9.33	1.98	047	0.41	1.14 @
<b>5</b> 2.	LS	20.13	3.42	19.44	3.63	.69	0.71	.97@
<b>6</b> 3.	E	6.23	1.5	6.65	1.58	0.42	0.32	.31@
74.	TLM	3.79	1.18	3.94	1	0.15	0. 22	68@
8	ICT	3.72	1.42	3.61	1.54	0.11	0.29	38@
	Overall	97.89	3.41	96.82	9.45	1.07	1.38	.78@

slightly higher in their perspective towards role of DIETs in Curricular Activities (CA)for

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enhancing knowledge and skills among elementary school teachers ( $M_1$ =22.73) than female inservice teacher trainees ( $M_2$ =22.33). From the SD values, it is clear that female inservice teacher trainees' perspective towards role of DIETs in Curricular Activities (CA) for enhancing knowledge and skills among elementary school teachers ( $SD_1$ =2.91) is slightly deviated from the male inservice teacher trainees ( $SD_2$ =3.03).

t- value (1.48) with respect to in-service teacher trainees' perspective towards role of DIETs in enhancing knowledge and skills among in-service elementary school teachers of Upper Assam ( $M_1$ =8.41,  $SD_1$ = 2.3,  $M_2$ =9.15, D= 0.74,  $SD_2$ = 2.02, SEd= 0.22, df=98) P ≤ 0.01 is significant. It means that gender is differing in in-service teacher trainees' perspective towards role of DIETs in enhancing knowledge and skills among in-service elementary school teachers in Co-curricular Activities (CoA). From the mean values, it is clear that female in-service teacher trainees are slightly higher in their perspective towards role of DIETs in Co curricular Activities (CoA) for enhancing knowledge and skills among in-service elementary school teachers ( $M_2$ =9.15) than male in-service teacher trainees ( $M_1$ =8.41). From the SD values, it is clear that female in-service teacher trainees' perceptive towards role of DIETs in Co-curricular Activities (CoA) for enhancing knowledge and skills among elementary school teachers ( $SD_2$ =2.02) is slightly deviated from the male in-service teacher trainees ( $SD_1$ =2.3).

t - value (0.30 ) with respect to in-service teacher trainees' perspective towards role of DIETs in enhancing knowledge and skills among in-service elementary school teachers of Upper Assam ( $M_1$ =12.28,  $SD_1$ = 1.76,  $M_2$ =12.17,  $SD_2$ = 1.96, D=0.11, SEd= 0.37, df =98) P ≤ 0.01 is not significant. It means that gender does not differ in in-service teacher trainees' perspective towards role of DIETs in enhancing knowledge and skills among in-service elementary school teachers in Teaching Methods (TM). From the mean values, it is clear that male in-service teacher trainees are slightly higher in their perspective towards role of DIETs with regard to Teaching Methods (TM) for enhancing knowledge and skills among in-service elementary school teachers ( $M_1$ =12.28) than female in-service teacher trainees ( $M_2$ =12.17). From the SD values, it is clear that male in-service teacher trainees' perspective towards role of DIETs with regard to Teaching Method (TM) for enhancing knowledge and skills among elementary school teachers (TM) is slightly deviated from the female in-service teacher trainees (TM) (TM) (TM) (TM) (TM) is slightly deviated from the female in-service teacher trainees (TM) (TM) (TM) (TM) (TM)

t - value (1.14 ) with respect to in-service teacher trainees' perspective towards role of DIETs in enhancing knowledge and skills among in-service elementary school teachers of Upper

Assam ( $M_1$ =9.8,  $SD_1$ = 2.13,  $M_2$ =9.33,  $SD_2$ = 1.98, D=0.47, SEd= 0.41, df =98)  $P \le 0.01$  is not significant. It means that gender does not differ in in-service teacher trainees' perspective towards role of DIETs in enhancing knowledge and skills among in-service elementary school teachers in Teaching Skills (TS). From the mean values, it is clear that male in-service teacher trainees are slightly higher in their perspective towards role of DIETs with regard to Teaching Skills (TS) for enhancing knowledge and skills among in-service elementary school teachers ( $M_1$ =9.8) than female in-service teacher trainees ( $M_2$ =9.33). From the SD values, it is clear that female in-service teacher trainees' perspective towards role of DIETs with regard to Teaching Skills (TS) for enhancing knowledge and skills among elementary school teachers ( $SD_2$ =1.98) is deviated from the male inservice teacher trainees ( $SD_1$ =2.13).

t - value (.97 ) with respect to in-service teacher trainees' perspective towards role of DIETs in enhancing knowledge and skills among in-service elementary school teachers of Upper Assam ( $M_1$ =20.13,  $SD_1$ = 3.42,  $M_2$ =19.44,  $SD_2$ = 3.63, D=0.69, SEd= 0.71, df =98) P ≤ 0.01 is not significant. It means that gender does not differ in in-service teacher trainees' perspective towards role of DIETs in enhancing knowledge and skills among in-service elementary school teachers in Life Skills (LS). From the Mean values, it is clear that male in-service teacher trainees are slightly higher in their perspective towards role of DIETs with regard to Life Skills (LS) activity for enhancing knowledge and skills among in-service elementary school teachers ( $M_1$ =20.13) than female teacher trainees ( $M_2$ =19.44). From the SD values, it is clear that male in-service teacher trainees' perspective towards role of DIETs with regard to Life Skills (LS) for enhancing knowledge and skills among elementary school teachers ( $SD_1$ =3.42) is slightly deviated from the female in-service teacher trainees ( $SD_2$ =3.63).

t - value (1.31) with respect to in-service teacher trainees' perspective towards role of DIETs in enhancing knowledge and skills among in-service elementary school teachers of Upper Assam ( $M_1$ =6.23,  $SD_1$ = 1.50  $M_2$ =6.65,  $SD_2$ = 1.58, D= 0.42, SEd= 0.32, df =98) P ≤ 0.01 is not significant. It means that gender does not differ in in-service teacher trainees' perspective towards role of DIETs in enhancing knowledge and skills among in-service elementary school teachers in Evaluation (E). From the mean values, it is clear that female in-service teacher trainees are slightly higher in their perspective towards role of DIETs with regard to Evaluation (E) for enhancing knowledge and skills among in-service elementary school teachers ( $M_2$ =6.65) than male in-service teacher trainees ( $M_1$ =6.23). From the SD values, it is clear that male in-service teacher trainees' perspective towards role of DIETs with regard to Evaluation (E) for enhancing knowledge and

skills among elementary school teachers ( $SD_1=1.50$ ) is slightly deviated from the female in-service teacher trainees ( $SD_2=1.58$ ).

t - value (.68 ) with respect to in-service teacher trainees' perspective towards role of DIETs in enhancing knowledge and skills among in-service elementary school teachers of Upper Assam ( $M_1$ =3.79,  $SD_1$ = 1.18  $M_2$ =3.94,  $SD_2$ = 1.00, D=0.15, SEd= 0.22, df=98)  $P \le 0.01$  is not significant. It means that gender does not differ in in-service teacher trainees' perspective towards role of DIETs in enhancing knowledge and skills among in-service elementary school teachers in Teaching Learning Materials (TLM). From the mean values, it is clear that female in-service teacher trainees are slightly higher in their perspective towards role of DIETs with regard to Teaching Learning Materials (TLM) for enhancing knowledge and skills among in-service elementary school teachers ( $M_2$ =3.94) than male in-service teacher trainees ( $M_1$ =3.79). From the SD values, it is clear that female in-service teacher trainees' perspective towards role of DIETs with regard to Teaching Learning Materials (TLM) for enhancing knowledge and skills among elementary school teachers ( $SD_2$ =1.00) is slightly deviated from the male in-service teacher trainees (TLM) ( $SD_1$ =1.18).

t-value (0.38 ) with respect to in-service teacher trainees' perspective towards role of DIETs in enhancing knowledge and skills among in-service elementary school teachers of Upper Assam ( $M_1$ =3.72,  $SD_1$ = 1.42  $M_2$ =3.61,  $SD_2$ = 1.54, D= 0.11, SEd= 0.29, df=98) P ≤ 0.01 is not significant. It means that gender does not differ in in-service teacher trainees' perspective towards role of DIETs in enhancing knowledge and skills among in-service elementary school teachers in Information and Communication Technology (ICT). From the mean values, it is clear that male inservice teacher trainees are higher in their perspective towards role of DIETs with regard to information and communication technology for enhancing knowledge and skills among in-service elementary school teachers ( $M_1$ =3.72) than female in-service teacher trainees ( $M_2$ =3.61). From the SD values, it is clear that male in-service teacher trainees' perspective towards role of DIETs with regard to Information and Communication Technology (ICT) for enhancing knowledge and skills among elementary school teachers ( $SD_1$ =1.42) is slightly deviated from the male in-service teacher trainees ( $SD_2$ =1.54).

overall t - value (0.78) with respect to in-service teacher trainees' perspective towards role of DIETs in enhancing knowledge and skills among in-service elementary school teachers of Upper Assam ( $M_1$ =97.89,  $SD_1$ = 3.41;  $M_2$ =96.82,  $SD_2$  = 9.45, D=1.07, SEd = 1.33, df =98) P ≤ 0.01 is not

significant. It means that gender does not differ in in in-service teacher trainees' perspective towards role of DIETs in enhancing knowledge and skills among in-service elementary school teachers in all dimensions. From the mean values, it is clear that male in-service teacher trainees are higher in their perspective towards role of DIETs with regard to all dimensions for enhancing knowledge and skills among in-service elementary school teachers ( $M_1$ =97.89) than female inservice teacher trainees ( $M_2$ =96.82). From the SD values, it is clear that male in-service teacher

trainees'
perspective
towards role of
DIETs with regard
to all dimensions
for enhancing
knowledge and
skills among

Dimensions		Rural (N1=40)		Urban (N2=60)		D=	SEd	t- value
Sl.No.		M <sub>1</sub>	SD <sub>1</sub>	M <sub>2</sub>	SD <sub>2</sub>	$M_1-M_2$		
1	CA	21.92	3.03	22.50	2.85	.58	0.61	0.95@
2	Co A	8.70	2.44	9.13	2.08	0.43	0.47	0.91@
3	TM	11.45	2.18	11.57	2.3	0.12	.46	0.26@
4	TS	9.53	2.13	9.40	2.07	0.13	0.42	0.31@
5	LS	18.70	3.78	19.80	3.30	1.10	073	1.51@
6	Е	6.10	1.42	6.57	1.54	0.47	0.30	1.57@
7	TLM)	4.00	1.16	3.70	1.20	0.30	022	1.36@
8	ICT	3.40	1.48	3.80	1.52	0.40	0.32	1.25@
Overall		97.00	8.33	96.42	7.21	.58	1.64	0.35@

elementary school teachers ( $SD_1=3.41$ ) is deviated from the female in-service teacher trainees' ( $SD_2=9.45$ ).

Objective-2: To study the in-service teachers' perspective towards role of DIETs in enhancing knowledge and skills among in-service elementary school teachers of Upper Assam with respect to locality.

Ho-2: There is no significant difference in in-service elementary school teachers' perspective towards role of DIETs in enhancing knowledge and skills among in-service elementary school teachers in Upper Assam with regard to locality.

**Table-2:** Shows Mean, SD, D, SEd and t-values for Curricular activities, Co curricular activities, Teaching Methods, Teaching skills, Life Skills, Evaluation, Teaching Learning materials and Information and Communication Technology.

From the table- 2, it is clear that, t-value (.95) with respect to in-service teacher trainees' perspective towards role of DIETs in enhancing knowledge and skills among in-service elementary school teachers ( $M_1$ =21.92,  $SD_1$ = 3.03;  $M_2$ =22.50,  $SD_2$ = 2.85, D=0.58, SEd= 0. 61, df=98) P ≤ 0.01 is not significant. It means that locality does not differ in in-service elementary school teachers' knowledge and skills towards Curricular Activities (CA). From the mean values, it is clear that urban in-service teacher trainees are slightly higher in their perspective towards role of DIETs with regard to Curricular Activities (CA) for enhancing knowledge and skills among in-service

elementary school teachers ( $M_2$ =22.50) than rural in-service teacher trainees ( $M_1$ =21.92). From the SD values, it is clear that urban in-service teacher trainees' perspective towards role of DIETs with regard Curricular Activities (CA) for enhancing knowledge and skills among elementary school teachers ( $SD_2$ =2.85) is deviated from the rural in-service teacher trainees ( $SD_1$ =3.03).

t - value (0.91) with respect to in-service teacher trainees perspective towards role of DIETs in enhancing knowledge and skills among in-service elementary school teachers ( $M_1$ =8.7,  $SD_1$ = 2.44;  $M_2$ =9.13,  $SD_2$  = 2.08, D=0.43, SEd= 0.47 df =98)  $P \le 0.01$  is not significant. It means that locality does not differ in in-service elementary school teachers' knowledge and skill towards Co-curricular Activities (CoA). From the mean values, it is clear that urban in-service teacher trainees are higher in their perspective towards role of DIETs with respect to Co curricular Activities (Co A) for enhancing knowledge and skills among in-service elementary school teachers ( $M_2$ =9.13) than rural in-service teacher trainees ( $M_1$ =8.7). From the SD values, it is clear that urban in-service teacher trainees perspective towards role of DIETs in Co curricular Activities (Co A) for enhancing knowledge and skills among elementary school teachers ( $SD_2$ =2.08) is slightly deviated from the rural in-service teacher trainees ( $SD_1$ =2.44).

DIETs in enhancing knowledge and skills among in-service elementary school teachers ( $M_1$ =11.45,  $SD_1$ = 2.18;  $M_2$ =11.57,  $SD_2$  = 2.30, D=0.12, SEd= 0.46, df=98) P ≤ 0.01 is not significant. It means that locality does not differ in in-service elementary school teachers' knowledge and skills towards Teaching Methods (TM). From the mean values, it is clear that urban in-service teacher trainees' are slightly higher in their perspective towards role of DIETs with respect to Teaching Methods (TM) for enhancing knowledge and skills among in-service elementary school teachers ( $M_2$ =11.57) than rural in-service teacher trainees ( $M_1$ =11.45). From the SD values, it is clear that rural in-service teacher trainees' perspective towards role of DIETs with regard to Teaching Methods (TM) for enhancing knowledge and skills among elementary school teachers ( $SD_1$ =2.18) is slightly deviated from the urban in-service teacher trainees ( $SD_2$ =2.30).

t - value (0.31) with respect to in-service teacher trainees' perspective towards role of DIETs in enhancing knowledge and skills among in-service elementary school teachers ( $M_1$ =9.53,  $SD_1$ = 2.13;  $M_2$ =9.40,  $SD_2$ = 2.07, D=0.13, SEd= 0.42, df=98) P ≤ 0.01 is not significant. It means that locality does not differ in in-service elementary school teachers' knowledge and skill towards Teaching Skills (TS). From the mean values, it is clear that rural in-service teacher trainees are slightly higher in their perspective towards role of DIETs with regard to Teaching Skills (TS) for enhancing knowledge and skills among in-service elementary school teachers ( $M_1$ =9.53) than urban

in-service teacher trainees ( $M_2$ =9.40). From the SD values, it is clear that rural in-service teacher trainees' perspective towards role of DIETs with regard to Teaching Skills (TS) for enhancing knowledge and skills among elementary school teachers ( $SD_2$ =2.07) is slightly deviated from the urban in-service teacher trainees ( $SD_2$ =2.13).

t - value (1.51) with respect to in-service teacher trainees' perspective towards role of DIETs in enhancing knowledge and skills among in-service elementary school teachers ( $M_1$ =18.70,  $SD_1$ =3.78;  $M_2$ =19.80,  $SD_2$  = 3.30, D=1.10, SEd= 0.73, df=98) P ≤ 0.01 is not significant. It means that locality does not differ in in-service elementary school teachers' knowledge and skills towards life skills. From the mean values, it is clear that rural in-service teacher trainees are slightly higher in their perspective towards role of DIETs with regard to Life Skills (LS) for enhancing knowledge and skills among in-service elementary school teachers ( $M_1$ =19.80) than urban in-service teacher trainees ( $M_2$ =18.70). From the SD values, it is clear that urban in-service teacher trainees' perspective towards role of DIETs with regard to Life Skills (LS) for enhancing knowledge and skills among elementary school teachers ( $SD_2$ =3.30) is slightly deviated from the urban in-service teacher trainees ( $SD_2$ =3.78).

t - value (1.57) with respect to in-service teacher trainees' perspective towards role of DIETs in enhancing knowledge and skills among in-service elementary school teachers ( $M_1$ =6.10,  $SD_1$ =1.42;  $M_2$ =6.57,  $SD_2$  = 1.54, D=0.47, SEd= 0.30, df =98) is not significant. It means that locality does not differ in in-service elementary school teachers' knowledge and skills towards Evaluation (E). From the mean values, it is clear that urban in-service teacher trainees are slightly higher in their perspective towards role of DIETs with regard to Evaluation (E) for enhancing knowledge and skills among in-service elementary school teachers ( $M_2$ =6.57) than rural in-service teacher trainees ( $M_1$ =6.10). From the SD values, it is clear that rural in-service teacher trainees perspective towards role of DIETs with regard to Evaluation (E) for enhancing knowledge and skills among elementary school teachers ( $SD_1$ =1.42) is slightly deviated from the urban in-service teacher trainees ( $SD_2$ =1.54).

t - value (1.36) with respect to in-service teacher trainees' perspective towards role of DIETs in enhancing knowledge and skills among in-service elementary school teachers ( $M_1$ =4,  $SD_1$ = 1.16;  $M_2$ =3.7,  $SD_2$  = 1.2, D= 0.30, SEd= 0.22, df =98) P ≤ 0.01 is not significant. It means that locality does not differ in in-service elementary school teachers' knowledge and skills towards preparing and using Teaching Learning Materials (TLM). From the mean values, it is clear that rural inservice teacher trainees are slightly higher in their perspective towards role of DIETs with regard to Teaching Learning Materials (TLM) for enhancing knowledge and skills among in-service

elementary school teachers ( $M_1$ =4) than urban in-service teacher trainees ( $M_2$ =3.7). From the SD values, it is clear that rural in-service teacher trainees' perspective towards role of DIETs with regard to Teaching Learning Materials (TLM) for enhancing knowledge and skills among elementary school teachers ( $SD_1$ =1.16) is slightly deviated from the urban in-service teacher trainees ( $SD_2$ =1.20).

t - value (1.25) with respect to in-service teacher trainees' perspective towards role of DIETs in enhancing knowledge and skills among in-service elementary school teachers ( $M_1$ =3.4,  $SD_1$ =1.48;  $M_2$ =3.8,  $SD_2$ =1.52, D=0.40, SEd=0.32, df=98) P  $\leq$  0.01 is not significant. It means that locality does not differ in in-service elementary school teachers' knowledge and skills towards Information and Communication Technology (ICT). From the mean values, it is clear that urban inservice teacher trainees are slightly higher in their perspective towards role of DIETs with regard to Information and Communication Technology (ICT) for enhancing knowledge and skills among inservice elementary school teachers ( $M_2$ =3.8) than rural in-service teacher trainees ( $M_1$ =3.7). From the SD values, it is clear that rural in-service teacher trainees' perspective towards role of DIETs in teaching learning material for enhancing knowledge and skills among elementary school teachers ( $SD_1$ =1.48) is slightly deviated from the urban in-service teacher trainees ( $SD_2$ =1.52).

Overall t-value (.35) with respect to in-service teacher trainees' perspective towards role of DIETs in enhancing knowledge and skills among in-service elementary school teachers ( $M_1$ =97.00,  $SD_1$ = 8.33;  $M_2$ =96.42,  $SD_2$  = 7.21, D= 0.58, SEd = 1.64, df =98) p<0.01, is not significant. It means that locality does not differ in in-service elementary school teachers' knowledge and skill towards all dimension. From the mean values, it is clear that rural in-service teacher trainees are slightly higher in their perspective towards role of DIETs with regard to all dimensions for enhancing knowledge and skills among in-service elementary school teachers ( $M_1$ =97.00) than urban inservice teacher trainees ( $M_2$ =96.42). From the SD values, it is clear that urban in-service teacher trainees' perspective towards role of DIETs in all dimensions for enhancing knowledge and skills among elementary school teachers ( $SD_2$ =7.21) is slightly deviated from the rural in-service teacher trainees ( $SD_1$ = 8.33).

**Objective-3:** To study in-service teacher trainees' perspective towards role of DIETs in enhancing knowledge and skills among the in-service elementary school teachers of Upper Assam with respect to caste.

**Ho-3:** There is no significant difference in enhancing knowledge and skills among General, OBC, SC and ST in-service elementary school teachers of Upper Assam.

**Table-3**: shows Mean, SS, MSV & F-values for Curricular activities (CA), Co-curricular Activities (Co A), Teaching Methods (TM), Teaching Skills (TS), Life Skills (LS), Evaluation (E), Teaching Learning Materials (TLM), Information and Communication Technology(ICT) and Overall with respect to caste.

Di		Sub categories							F-
en									valu
on	S			Mean	S V	SS	df	MSV	
				Mean	S V	33	aı	MSV	e
		Variabl	es						
			Gen (N1=25)	21.84	Among				
			OBC (N2=43)	22.56	group	18.20	3	6.07	
			SC (N3=20)	23.10	Within				
CA	4	Caste	ST (N4=12)	22.50	conditio	790.76	96	8.24	0.74
				\L/	n				@
		<b>/</b> e	_ `	22.48	total	808.96	99		w
			Gen (N1=25)	8.96	Among				
			OBC (N2=43)	10.02	group	27.96	3	9.32	
		Caste	SC (N3=20)	10.15	Within	- 1		2.83	
C	0		ST (N4=12)	9.00	conditio	272.48	96	2.00	3.29
A			01 (14-12)	7.00	n	2720.0			
		,		9.66	Total	300.44	99		@
			Gen (N1=25)	11.00	Among				
			OBC (N2=43)	12.49	group	43.02	3	14.3	10
TN	<b>I</b>	Caste					1	4	
			SC (N3=20)	12.35	Within			J	•
			ST (N4=12)	12.75	conditio	466.54	96	4.86	2.05
					n				2.95
				12.12		509.56	99		@
			Gen (N1=25)	9.00	Among	23.61			
			OBC (N2=43)	10.05	group		3	7.87	
T	S	Caste	SC (N3=20)	9.95	Within				
			ST (N4=12)	10.42	conditio	52.78	96	0.55	14.3
					n				1*
				9.81	total	76.39	99		1,
			Gen (N1=25)	19.04	Among				
			OBC (N2=43)	20.51	group	201.87	3	67.2	
L	S	Caste						9	
			SC (N3=20)	21.55	Within				31.4
			ST (N4=12)	16.83	conditio	205.32	96	2.14	4*
				10.01	n	407.60	0.0		
				19.91	total	407.19	99		
			Gen (N1=25)	5.64	Among				
			_ (		8			<u> </u>	

		OBC (N2=43)	6.93	group	42.14	3	0.44	0.14	
E	Caste	SC (N3=20)	6.95	Within	318.50			@	
		ST (N4=12)	5.50	conditio		96	3.22	l w	
				n					From
			6.44	Total	360.64	99			the table -
		Gen (N1=25)	3.52	Among					the table -
TL		OBC (N2=43)	4.00	group	4.13	3	1.38	1.44	3it is clear
M	Caste	SC (N3=20)	4.00	Within	91.91	96	0.96	1.77	that, F-value
		ST (N4=12)	3.83	conditio				@	mat, 1-value
				n					(0.74) with
			3.86	Total	96.04	99			respect to
ICT		Gen (N1=25)	3.12	Among	17.10	3	5.7		1 cspect to
		OBC(N2=43)	4.09	group				3.13	in-service
	Caste	SC (N3=20)	3.50	Within				3.13	teacher
		ST (N4=12)	3.33	conditio	174.94	96	1.82	@	
				n					trainees'
			3.64	Total	192.04	99			perspective
		Gen (N1=25)	82.16	Among					perspective
		OBC(N2=43)	90.14	group	1519.45	3	506.	4 21	towards role
Ove	Caste		\/				48	4.21	of DIETs in
rall	<b>7</b> 0	SC (N3=20)	90.15	Within	11557.99	96	120.	@	
	-	ST (N4=12)	81.92	conditio			40		enhancing
			<u> </u>	n		-3			knowledge

nhancing nowledge and skills among in-service elementary school teachers of Upper Assam due to variation in caste  $(M_1=21.84, N_1=25, M_2=22.56, N_2=43, M_3=23.10, N_3=20, M_4=22.50, N_4==12, SSa=18.20,$ SSw=790.76 dfa=3,dfb=96, MSa=6.07, MSw=8.24) p $\leq$ 0.01 is not significant. It means that caste does not differ in in-service elementary school teachers' knowledge and skills towards Curricular Activities (CA). From the mean values, it is clear that SC in-service teacher trainees teachers are slightly higher in their perspective towards role of DIETs with regard to Curricular Activities(CA) for enhancing knowledge and skills among in-service elementary teachers (M<sub>3</sub>=23.10) than General, OBC, and ST teacher trainees ( $M_1=21.84$ ,  $M_2=22.56$ ,  $M_4=22.50$ ).

F - value (3.29) with respect to in-service teacher trainees perspective towards role of DIETs in enhancing knowledge and skills among in-service elementary school teachers of Upper Assam due to variation in caste  $(M_1=8.96, N_1=25, M_2=10.02, N_2=43, M_3=10.15, N_3=20 M_4=9.00)$  $N_4=12$ , SSa=27.96, SSw=272.48 dfa=3, dfb=96, MSa=9.32, MSw=2.83) p $\leq$ 0.01 is not significant. It means that caste does not differ in in-service elementary school teachers' knowledge and skills towards Co curricular Activities (Co A). From the mean values, it is clear that SC in-service teacher trainees are slightly higher in their perspective towards role of DIETs with regard to Co-curricular Activities (Co A) for enhancing knowledge and skills among in-service elementary teachers  $(M_3=10.15)$  than General, OBC, and ST teacher trainees  $(M_1=8.96, M_2=10.02, M_4=9.00)$ .

F - value (2.95) with respect to in-service elementary school teachers' perspective towards role of DIETs in enhancing knowledge and skills among in-service elementary school teachers of Upper Assam due to variation in caste ( $M_1$ =11.00,  $N_1$ =25,  $M_2$ =12.49,  $N_2$ =43,  $M_3$ =12.35,  $N_3$ =20  $M_4$ =12.75  $N_4$ =12,SSa=43.02, SSw=466.54 dfa=3,dfb=96, MSa=14.34, MSw=4.86) p≤0.01 is not significant. It means that caste does not differ in in-service elementary school teachers' knowledge and skills towards Teaching Methods (TM). From the mean values, it is clear that ST in-service teacher trainees are slightly higher in their perspective towards role of DIETs with regard to Teaching Methods for enhancing knowledge and skill among in-service elementary teachers ( $M_4$ =12.75) than General, OBC, and SC teacher trainees ( $M_1$ =11.00,  $M_2$ =12.49,  $M_3$ =12.35).

F- value (14.31) with respect to in-service teacher trainees perspective towards role of DIETs in enhancing knowledge and skills among in-service elementary school teachers of Upper Assam due to variation in caste ( $M_1$ =9.00,  $N_1$ =25,  $M_2$ =10.05,  $N_2$ =43,  $M_3$ =9.95,  $N_3$ =20,  $M_4$ =10.42,  $N_4$ =12,SSa=23.61, SSw=52.78 dfa=3,dfb=96, MSa=7.87, MSw=.55) p $\geq$ 0.01 is significant. It means caste is differing in in-service elementary school teachers' knowledge and skills towards Teaching Skills (TS). From the mean values, it is clear that ST in-service teacher trainees are slightly higher in their perspective towards role of DIETs in teaching skills for enhancing knowledge and skills among in-service elementary teachers ( $M_4$ =10.42) than General, OBC, and SC teacher trainees ( $M_1$ =9.00,  $M_2$ =10.05,  $M_3$ =9.95).

F - value (31.44) with respect to in-service teacher trainees perspective towards role of DIETs in enhancing knowledge and skills among in-service elementary school teachers of Upper Assam due to variation in caste ( $M_1$ =19.04,  $N_1$ =25,  $M_2$ =20.51,  $N_2$ =43,  $M_3$ =21.55,  $N_3$ =20  $M_4$ =16.83  $N_4$ =12,SSa=201.87, SSw=205.32 dfa=3,dfb=96, MSa=67.29, MSw=2.14) p≥0.01 is significant. It means that caste is differing in in-service elementary school teachers' knowledge and skills towards Life Skills. From the mean values, it is clear that SC in-service teacher trainees are slightly higher in their perspective towards role of DIETs with regard to Life Skills (LS) for enhancing knowledge and skills among in-service elementary teachers ( $M_3$ =21.55) than General, OBC, and ST teacher trainees ( $M_1$ =19.04,  $M_2$ =20.51,  $M_4$ =16.83).

F- value (.14) with respect to in-service teacher trainees perspective towards role of DIETs in enhancing knowledge and skills among in-service elementary school teachers of Upper Assam due to variation in caste ( $M_1$ =5.64,  $N_1$ =25,  $M_2$ =6.93,  $N_2$ =43,  $M_3$ =6.95,  $N_3$ =20,  $M_4$ =5.50,  $N_4$ =12, SSa=42.14, SSw=318.50 dfa=3,dfb=96, MSa=.44, MSw=3.22) p≤0.01 is not significant. It means that caste does not differ in in-service elementary school teachers' knowledge and skills towards

evaluation. From the mean values, it is clear that SC in-service teacher trainees are slightly higher in their perspective towards role of DIETs with regard to Evaluation (E) for enhancing knowledge and skills among in-service elementary teachers ( $M_3$ =6.95) than General, OBC, and ST teacher trainees ( $M_1$ =5.64,  $M_2$ =6.93,  $M_4$ =5.50).

F - value (1.44) with respect to in-service teacher trainees perspective towards role of DIETs in enhancing knowledge and skills among in-service elementary school teachers of Upper Assam due to variation in caste ( $M_1$ =3.52,  $N_1$ =25,  $M_2$ =4.00,  $N_2$ =43,  $M_3$ =4.00,  $N_3$ =20  $M_4$ =3.88  $N_4$ =12,SSa=4.13, SSw=91.91 dfa=3,dfb=96, MSa=1.38, MSw=.96) p≤0.01 is not significant. It means that caste does not differ in in-service elementary school teachers' knowledge and skills towards Teaching Learning Material. From the mean values, it is clear that OBC and SC in-service teacher trainees are slightly higher in their perspective towards role of DIETs with regard to Teaching Learning Materials (TLM) for enhancing knowledge and skills among in-service elementary teachers ( $M_2$ =4.00,  $M_3$ =4.00) than General and ST teacher trainees ( $M_1$ =3.52,  $M_4$ =3.88).

F - value (3.13) with respect to in-service teacher trainees' perspective towards role of DIETs in enhancing knowledge and skills among in-service elementary school teachers of Upper Assam due to variation in caste ( $M_1$ =3.12,  $N_1$ =25,  $M_2$ =4.09,  $N_2$ =43,  $M_3$ =3.50,  $N_3$ =20  $M_4$ =3.33  $N_4$ =12, SSa=17.10, SSw=174.94 dfa=3,dfb=96, MSa=5.7, MSw=1.82) p≤0.01 is not significant. It means that caste does not differ in in-service elementary school teachers' knowledge and skills towards Information and Communication Technology. From the mean values, it is clear that OBC in-service teacher trainees are slightly higher in their perspective towards role of DIETs with regard to Information and Communication Technology(ICT) for enhancing knowledge and skills among in-service elementary teachers ( $M_2$ =4.09) than General, SC and ST teacher trainees ( $M_1$ =3.12,  $M_2$ =4.09,  $M_4$ =3.33).

Overall F - value (4.21) with respect to in-service teacher trainees perspective towards role of DIETs in enhancing knowledge and skills among in-service elementary school teachers of Upper Assam due to variation in caste ( $M_1$ =82.16,  $N_1$ =25,  $M_2$ =90.14,  $N_2$ =43,  $M_3$ =90.15,  $N_3$ =20  $M_4$ =81.92  $N_4$ =12, SSa=1519.45, SSw=11557.99 dfa=3,dfb=96, MSa=506.48, MSw =120.40) p≤0.01 is not significant. It means that caste does not differ in in-service elementary school teachers knowledge and skills towards all dimensions i.e. Curricular Activities (CA), Co curricular Activities (Co A),Teaching Methods (TM),Teaching Skills (TS), Life Skills (LS), Evaluation (E),Teaching Learning Materials(TLM), Information and Communication Technology(ICT). From the mean

values, it is clear that SC in-service teacher trainees are slightly higher in their perspective towards role of DIETs with regard to all dimensions for enhancing knowledge and skills among in-service elementary teachers ( $M_3$ =90.15) than OBC teacher trainees ( $M_2$ =90.14). OBC and SC in-service teacher trainees are higher in their perspective towards role of DIETs with regard to all dimensions for enhancing knowledge and skills among in-service elementary teachers ( $M_2$ =90.14,  $M_3$ =90.15) than General and ST teacher trainees ( $M_1$ =82.16,  $M_4$ =81.92).

# **Discussion of the Result:**

The perception of in-service teacher trainees of 4 DIET colleges located in Upper Assam towards role of DIETs in enhancing knowledge and skills among in-service elementary school teachers, it is to be noted that in-service teacher trainees have positive perception towards role of DIETs. This study also reveals that the male- female, rural-urban and different caste in-service teacher trainees of DIET Colleges had almost same positive attitude towards role of DIETs in enhancement of knowledge and skills among in-service elementary school teachers. Since there is no difference found among the in-service teacher trainees of 4 DIET Colleges towards role of DIETs with respect to gender, locality and caste variables. Again from the study it was found that there is no significant difference between male and female, rural and urban in-service teacher trainees perception towards role of DIET with respect to Curricular activities, Co curricular activities, Teaching Methods, Teaching Skills, Life Skills, Evaluation, Teaching Learning Materials and Information and Communication Technology dimensions. On the other hand, there is significant difference found among the in-service teacher trainees with respect to caste variable towards Teaching skills and life skills dimensions. Again there is no significant difference found among in-service teacher trainees towards effectiveness of DIET with respect to locality variable towards six dimensions. Therefore, this result conveys the message to the public and concerned authority that there has been not proper enhancement of knowledge and skills among in-service elementary school teachers of Upper Assam DIET Colleges.

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