

Inclination of Secondary School Teachers Towards Transformative Techno Pedagogy (TTP) in Itanagar Capital Complex of Arunachal Pradesh

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ABSTRACT:

Transformative techno pedagogy is a combination of transformative pedagogy and techno pedagogy. Transformative techno pedagogy is an advanced pedagogical strategy that allows teachers to encourage the students in developing spaces for reflective thinking, respect for diversity as well as critically analyze their immediate environment, thoughts, beliefs, abilities, and perspectives along with an understanding of the subject matter through the application of several TPACK dimensions. Therefore, the application of transformative techno-pedagogy in the twenty-first century gains prominence. As a result, Transformative Techno pedagogy related practices must be implemented in the classroom. Hence, the present research makes an attempt to assess secondary school teachers' Inclination towards Transformative Techno Pedagogy (TTP) with respect to gender and qualification. The researchers employed the descriptive cum survey method in this study. 200 secondary school teachers were chosen randomly from the target population for data collection from Itanagar Capital Complex of Arunachal Pradesh. Self-developed Inclination Scale was used for collection of data. Statistical methods such frequency, percentage, mean, standard deviation (Descriptive statistics) standard error of mean and 't' test (differential/inferential statistics) were applied to analyze the data. The result of study reveals that teachers are having high inclination towards Transformative Techno Pedagogy (TTP). The findings of the study reveals that there is no significant difference were found with respect to gender and qualification.

Keywords: Inclination, Transformative Techno Pedagogy

INTRODUCTION

The rate of transformation in pedagogical practices looked glacial throughout the 20th century, therefore, we have to think about the implementation of modern trends of pedagogical practices that should

be set to accelerate effective teaching and learning process in the 21st century. Some of these modern trends of pedagogical approaches are critical pedagogy, constructivist pedagogy, transformative pedagogy, techno pedagogy and behaviouristic pedagogy. It is almost impossible for teachers nowadays to stay away from addressing new technology, globalization, heterogeneous classrooms, changing aspects of teaching methods and civic duty, as well as the shifting domains of human personality and identity while transacting the curriculum. Teachers frequently have to bring attention to these broader societal problems in order to remain contemporary.

Today's children and young people are from the technological generation that grew up with video games, portable music players, and digital televisions in the developed and developing nations of the globe and they are the outcome of child-centered educational era. Therefore, they will never tolerate traditional classrooms in the same manner that earlier generations carried out because they are living in a technological era and demanded transformation in the existing traditional classroom into digital classroom which will be more interesting. Today's teachers are also not going to accept working environments that threaten their professionalism by controlling what, when, and how they will teach for that they need to have more awareness about the updated pedagogical practices through which they can remove the challenges face during teaching and learning process. During initial stages, e-learning often seemed to imitate the worst aspects of traditional teaching. However, the latest version of digital learning is establishing new learning environments in which teachers and students challenge and change the social relationships of traditional classrooms and teaching pedagogies for that both teachers and students must be good observers of changes occurs in their surroundings. This is the only means by which we can maintain our teaching and educational institutions updated and relevant.

More than that, teachers must set the agenda and encourage pedagogical transformation for effective teaching and learning process, it is the teachers who have the ability to transform educational institutions and classrooms through implementation of updated pedagogical practices. When teachers commence on these transformations, they contribute to the transformation of society as a whole through better teaching. Thus, in today's quickly changing educational world, teachers' role as transformative mediators is more important than ever.

This study focuses on the inclination of "Transformative Techno Pedagogy" (TTP) for cultivating innovative teacher for the present-day teaching and learning process. This study investigates the complex relationships between inclination and transformative techno pedagogy in the formation of innovative teacher, which plays an important role in transforming the educational environment of 21st-century. Transformative techno pedagogy offers a paradigm shift in learning, moving away from traditional teacher-centered methodologies to child-centered methodologies. It emphasizes active involvement, reflective thinking and analytical thinking, encouraging learners to take responsibility for their learning journey as well as establishing mastery of the subject matter through the implementation of Technological Pedagogical and Content Knowledge (TPACK).

Through a transformative techno-pedagogical framework, teachers aim is to foster students' intellectual curiosity, societal awareness, creativity, critical and reflective thinking, preparing them to deal with the constantly shifting global setting. The personality of teachers consists of thoughts, beliefs, experiences, and attitudes toward oneself, and it is critical to understand how they engage themselves in their classroom responsibilities with the awareness and favourable inclination towards transformative techno pedagogy for bringing effective transformation in the existing curriculum transaction.

This present study wants to show teacher's personality which is a dynamic structure that is constantly generated and strengthened as per the need of the time so that teachers can follow reflective practices, introspecting on their didactic experiences and educational experiences to deliver effective teaching in the classroom with the application of transformative techno pedagogy. Transformative techno pedagogy challenges traditional teaching and fostering an environment responsive to creative innovative teaching approaches. Understanding the various dimensions of teacher personality, this study attempts to discover the foundations of innovative teaching practices and their impact on learner participation, learning outcomes, and comprehensive educational experiences (Lakshmi & Priyadarshini, 2024).

There is an increasing quantity of research revealing that some types of innovative pedagogical strategies used in the teaching and learning process have a positive long-term impact on student well-being. Fundamental transformative interactions include activities, techniques, and interpersonal relationships that inculcate in children a sense of belonging, purpose, identity and independence, each of which have been shown to improve overall well-being. However, despite the existence of best practices and supporting evidence, the teaching and learning process remains hesitant to accept innovative methods and stays dependent on traditional methods of teaching (white et al. 2024).

Therefore, one of the most significant teaching strategies for successful classroom instruction is the implementation of transformative techno pedagogy by the teachers. However, we found that teachers frequently attempt to teach a monocultural perspective in the classroom, assuming that their subject matter expertise is adequate. Thus, numerous studies indicate that a large portion of potential teachers' pedagogical expertise is conventionally based and lacks the depth of knowledge and conceptual understanding necessary to support students' active learning.

Thus, it is essential to integrate transformative techno pedagogy into the teaching and learning process since its inclusion in the curriculum contributes to help teachers become more skilled and bring transformation among students and it is only possible when we came to know about inclination towards transformative pedagogy and this present study wants to find out that. Content proficiency, intellectual understanding, methodological proficiency, strategic skills, adaptive reasoning, and a positive attitude are the five interconnected and interrelated elements of good teaching that can be fulfil through the execution of transformative techno pedagogy only. The harsh reality is that teachers' lack of confidence in their ability to teach while implementing various pedagogical practices which is disappointing and leads to misconceptions

and confusion among students, therefore whatever the teacher is teaching, learners must accept it without critical conscience (Bhatt, 2021).

As a result, favourable inclination towards transformative techno pedagogy is required to meet both the present and the future social challenges brought by increasing globalization, COVID-19 pandemic, and changing climate, through which our students must be ready to face and handle those challenges. This analysis is based on the literature review on transformative pedagogy and techno pedagogy.

Throughout the years, research has also proven to us that the primary goal of learning is to produce transformation among the learner (Dewey, 1933; Mezirow, 2000). To achieve learning transformation, teachers must become aware of their existing mental habits and perspectives on view, but they must also engage in interrogation, reflecting, and criticizing their assumptions and justifications for the mindsets, as well as creating alternate viewpoints regarding implementation of updated pedagogical practices. Additionally, as the teaching and learning process changes day by day, learners would need to modify their points of mind by critically analyzing their presumptions and beliefs as well as deliberately creating and carrying out plans that result in novel ideas regarding the way to define their worlds and learning.

The transformative learning theory is concerned with the way teachers deliver lessons in educational settings that allow students to critically reflect on their learning experiences, including current information and beliefs, as well as how they incorporate new knowledge to represent a change in perspective along with teachers' knowledge about Technological Pedagogical and Content Knowledge (TPACK) which help the teachers to be competent in content knowledge, pedagogical knowledge and technological knowledge for providing effective teaching in the classroom.

In today's ever-changing fact, the definition of pedagogy - the science or art of teaching refers not only to instructional tactics or styles, but also to the fostering and administration of long-term transformations, whether individual learner, community, structural, or administrative. According to Meyers (2008), transformative pedagogy is a teaching approach that encourages learners to grasp with disorienting dilemmas, analyze their assumptions about contradictory information, search out additional perspectives, and eventually acquire novel knowledge, attitudes, and proficiency in light of these various reflections in order to experience both emotional and intellectual growth and according to Mishra & Koehler (2006) Techno pedagogy is connected with domains of Technological Pedagogical and Content Knowledge (TPACK) which provide knowledge about how to integrate content knowledge, pedagogical knowledge and technological knowledge during teaching and learning process for significant outcomes in teaching .

The majority of pedagogies should be considered formative in this sense because of their function in personal growth, but their transformative aspect should be explained, reviewed, and ultimately adjusted in light of the responsibility of teachers to go beyond their traditional pedagogical practices and broaden the scope of their responsibilities towards an active participation in order to make a significant contribution to the growth of knowledge and the role assigned to ICT (Information and Communication Technology) is to operate as a bridging artifact of developing networked educational systems, facilitating peer-to-peer cooperation as well as students' autonomy and responsibility for acquiring knowledge.

Rationale of the study

Teachers in twenty-first-century classrooms will need to adopt a wider range of teaching approaches that are appropriate and tailored to the needs of the scenario. With the arrival of the knowledge era, teachers must use innovative pedagogical practices to adjust the changing educational environments as well as use model pedagogies and resources that foster effective teaching and learning process. Nowadays, it is essential to teach creative and critical thinking to students in order to help them to think logically and solve problems in innovative ways.

Indian society desperately needs teachers who can develop both creative and critical thinking through implementation of advance pedagogical approaches in the classroom. It is becoming more widely acknowledged that teaching youngsters to think effectively is an immediate educational objective. This is because students need to be prepared for lifelong learning and ability to think critically so that they can adjust themselves and function successfully in a world that is constantly changing into a technological society. As a result, teachers must be competent in Transformative techno pedagogy in order to ignite their pupils' interest in learning new things.

Taimur and Onuki (2022) have examined how Design Thinking (DT) as a pedagogy can encourage transformative learning in digital scenarios. The study found that DT pedagogy effectively integrates every aspect of the DTP framework in both contexts to generate learning processes and a conducive atmosphere for transformative learning experiences.

Olivia et al. (2020) examined the impact of transformative pedagogical approaches in the behavioural transformation among students and found that implementing transformative pedagogical approaches effectively promotes behavioural change among pupils, resulting in a nonviolent school community.

Sahin and Dogantay (2018) highlighted the link between transformative education and critical thinking in students' lives and examined the connections between them. The study's findings revealed that students' experiences become a base for the transformative learning process, because critical thinking needs the development of knowledge of many ideas. Instead of memorization and rote learning of facts, transformative learning requires pupils to internalize the truth and also transform their physical and cognitive thoughts.

Kareepadath (2018) has investigated the variables that affect teachers' adoption of critical pedagogy in the classroom. The study found that teachers in Kerala were forced to adopt critical pedagogy by standardized curricula and a disciplined classroom environment. But through the science literature movement in Kerala teachers were also encouraged to be more critical of themselves and their own activities during the teaching and learning process in the classroom.

Panday and Mehata (2016) gives focuses on Paulo Freire's Theory application of Transformative Pedagogy in the Indian scenario. It aims was to explore the lived experiences of teachers and students in the context of disparities in higher education in particular and Indian society in general. The study found that Paulo's notion of critical pedagogy is vital for developing transformational pedagogy in India's formal

system of education and pedagogical culture to improve the teaching and learning environment. Everyone who participates in the school system plays an important role in raising critical awareness and positive attitudes through teaching methods, love, faith, and cooperation.

Sahoo (2024) has investigated pre-service teachers' TPACK with respect to the various streams and discovered pre-service teachers' TPACK is average among Khordha district B.Ed. students and there is no significant difference between the two streams regarding TPACK.

Chauhan (2024) has examined the levels of techno-pedagogical ability as well as mindset toward teaching with the application of techno pedagogical approaches among college faculties in Gurgaon District and discovered that these two factors were positively correlated. Additionally, there is a notable difference in the mean scores of techno-pedagogical abilities and mindset toward teaching with the application of techno pedagogical approaches among faculties with respect to locale, gender, experience & types of educational management.

Sarangi et al. (2023) have examined the importance of merging pedagogy and technology in secondary school science classes throughout India during the COVID-19 epidemic. The study's findings showed that integrating ICT with pedagogy improves the interest and participation of learners. It also encourages collaborative and inquiry-based learning, as well as enhance students' critical and creative thinking skills.

Lyonga et al. (2021) have looked into the relationship between techno-pedagogic abilities and teacher performance at HTTTC Kumba and found a strong positive correlation between the two.

Yulisman et al. (2019) have investigated the connection between teachers' technological abilities and their TPACK, in addition to the moderating effect of their attitudes on the connection between these two variables. They discovered that there was a positive connection between technological abilities and TPACK, and teachers' attitudes regarding technology integration might boost up this relationship.

At different levels of education, it is observed that the majority of studies have been undertaken on pedagogical approaches, but no study has been found on inclination towards “transformative techno pedagogy” in Itanagar Capital Complex of Arunachal Pradesh. There is a research gap with respect to inclination towards Transformative Techno Pedagogy (TTP) by secondary school teachers in Itanagar Capital Complex of Arunachal Pradesh. Thus, Secondary school teachers' opinions may differ so, the investigators given the importance to this study and decided to conduct this present study.

Objectives of the study

1. To study the level of secondary school teachers' inclination towards Transformative Techno Pedagogy (TTP) in Itanagar Capital Complex of Arunachal Pradesh.
2. To assess if, the inclination of secondary school teachers towards Transformative Techno Pedagogy (TTP) differs with respect to following independent variables:
 - a) Gender
 - b) Qualification

Hypotheses of the study

H₀₁: There is no significant difference in the inclination of secondary school teachers towards Transformative Techno Pedagogy (TTP) with respect to Gender.

H₀₂: There is no significant difference in the inclination of secondary school teachers towards Transformative Techno Pedagogy (TTP) with respect to Qualification.

Delimitations of the study

The present study has been delimited to:

- i. Government and non-government secondary schools in Capital Complex of Arunachal Pradesh.
- ii. Secondary school's teachers working both at Government and Non-government schools in Capital Complex of Arunachal Pradesh.
- iii. Two independent variables specifically: gender and qualification.
- iv. One dependent variable i.e. inclination.

Methodology

The investigators in this study used the Descriptive Cum Survey Method to determine the inclination of secondary school teachers toward Transformative Techno Pedagogy in Itanagar Capital Complex of Arunachal Pradesh. This study's target population consisted of all secondary school teachers in Itanagar Capital Complex of Arunachal Pradesh. The investigator employed the Proportional Stratified Random Sampling technique to collect data from 200 secondary school teachers from ten government and ten non-government secondary schools in Itanagar Capital Complex of Arunachal Pradesh. In this present study the researchers selected two independent variables namely gender (Male and Female) and qualification (under Graduate and Post Graduate) along with one dependent Variable i.e. inclination for data collection. Any tool employed in a research study may be considered as an important aspect of the study if its precision is determined by estimating reliability and validity, both of which are characteristics of an effective tool. Therefore, the researcher in this study used self-prepared inclination scale to assess the inclination of teachers working at secondary schools towards Transformative Techno Pedagogy. To verify the reliability and validity of the tool, the investigator has followed the required standardization procedures. Total number of statements for Inclination Scale kept in the final draft was 94 respectively. The researcher visited 20 Secondary Schools in Itanagar Capital Complex of Arunachal Pradesh and administered the self-prepared Inclination Scale on Transformative Techno Pedagogy on the representative sample of 200 teachers working at secondary school. The researcher built a strong relationship with the teachers before administering the tool and gave them the assurance that the responses they provided would be kept confidential. The researcher completed the scoring after the field study was completed. A procedure of assigning weights to individual responses in relation to each statement was used to score the scale i.e. 5, 4, 3, 2, and 1 to Strongly Agree, Agree, Undecided, Disagree and Strongly Disagree respectively for scoring a positive statement. On the other hand, for negative statement, the weightages were placed 1, 2, 3, 4, and 5 accordingly.

Results and discussions

The current study attempts to explore secondary school teachers' inclination on Transformative Techno Pedagogy on the basis of gender and qualification. Statistical procedures such as the frequency, percentage, mean, standard deviation, standard error of mean, as well as "t" test were used to analyse the data. The study's findings were presented sequentially based on the study's objectives. Data interpretations are as follows:

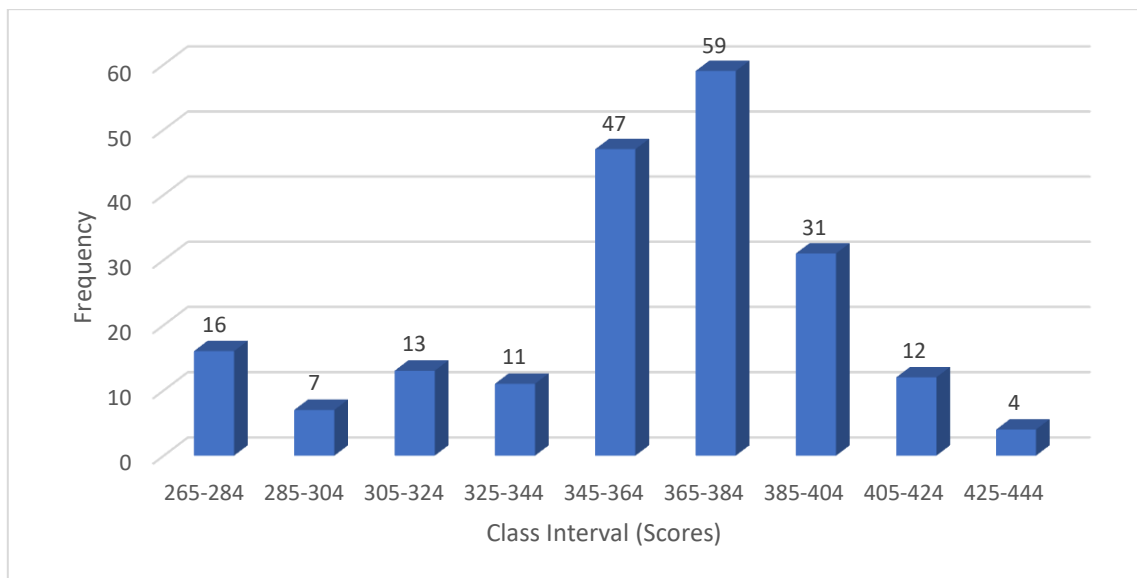
Objective 1: To study the level of secondary school teachers' inclination towards Transformative Techno Pedagogy (TTP) in Itanagar Capital Complex of Arunachal Pradesh.

Table- 1: Showing frequencies and percentage of secondary school teachers' level of Inclination towards Transformative Techno Pedagogy (TTP).

Secondary School Teachers' level of Inclination towards Transformative Techno Pedagogy						
Total sample 200	Low Level 265-344		Moderate Level 345-404		High Level 405-444	
	frequency	%	frequency	%	frequency	%
		47	23.5	137	68.5	16

From the table-1, it is clear that 23.5 % (f = 47, N = 200) of secondary school teachers in Itanagar Capital Complex of Arunachal Pradesh, have low level of Inclination towards Transformative Techno Pedagogy. 68.5 % (f = 137, N = 200) of secondary school teachers, have moderate level of Inclination towards Transformative Techno Pedagogy and 8 % (f = 16, N = 200) of secondary school teachers, have high level of Inclination towards Transformative Techno Pedagogy (TTP) in Itanagar Capital Complex of Arunachal Pradesh.

Fig.1: Showing the distribution of overall scores with respect to Inclination scale.



According to the above fig. 1, the researcher found that 47 respondents have scored in between 265 to 344 marks out of 200 respondents, 137 respondents have scored in between 345 to 404 marks out of 200 respondents and 16 respondents have scored in between 405 to 444 marks out of 200 respondents. Therefore, by looking at the scores of the respondents the investigator concluded that, there is an average level of inclination towards Transformative Techno Pedagogy (TTP) among secondary school teachers.

Inclination scale consists of 94 statements and 5, 4, 3, 2, and 1 was given to Strongly Agree, Agree, Undecided, Disagree and Strongly Disagree respectively for scoring a positive statement. On the other hand, for negative statement, the weightages were placed 1, 2, 3, 4, and 5 accordingly. In this way the maximum score of inclination scale is 470, minimum score is 94 and average score is 282. Further it was found that the mean score of inclination scale was 359.295 which is showing average level of inclination towards Transformative Techno Pedagogy (TTP) of secondary school teachers in Itanagar Capital Complex of Arunachal Pradesh because it is clear from the above fig no.1 highest frequencies lies in between 345 to 404 class intervals.

Objective 2: To assess if, the inclination of secondary school teachers towards Transformative Techno Pedagogy (TTP) differs with respect to following independent variables:

- a) Gender
- b) Qualification

Null Hypothesis 1: There is no significant difference in the inclination of secondary school teachers towards Transformative Techno Pedagogy (TTP) with respect to Gender.

Table 2: Displaying Dimension wise Significance Difference among Male and Female Teachers' Inclination regarding Transformative Techno Pedagogy.

Dimensions	Gender				D	SED	t-values
	Male (N ₁ =100)		Female (N ₂ =100)				
	M ₁	SD ₁	M ₂	SD ₂			
CP	48.13	5.66	48.35	6.51	0.22	0.86	0.26@
CONP	30.29	3.35	29.92	3.62	0.37	0.49	0.75@
BIR & BIB	40.1	5.56	40.2	5.9	0.1	0.81	0.12@
CK	35.79	5.76	35.66	5.83	0.13	0.82	0.16@
PK	32.16	4.8	31.75	5.04	0.41	0.7	0.59@
TK	29.04	3.24	28.03	4.17	1.01	0.53	1.91@
TCK	24.7	2.78	24.26	2.96	0.44	0.41	1.07@
PCK	42.07	5.21	41.8	5.77	0.27	0.78	0.35@
TPK	37.79	4.52	37.44	5.21	0.35	0.69	0.51@
TPACK	41.27	4.88	39.84	5.36	1.43	0.72	1.99@
Overall	361.34	33.62	357.25	40.29	4.09	5.25	0.78@

Note: CP=Critical Pedagogy, CONP=Constructivist Pedagogy, BIR & BIB=Beings-in-relation and being-in-becoming, CK=Content Knowledge, PK=Pedagogical Knowledge, TK=Technological Knowledge, TCK=Technological Content Knowledge, PCK=Pedagogical Content Knowledge, TPK=Technological Pedagogical Knowledge, TPACK= Technological Pedagogical and Content Knowledge, @ = Not Significant, * = Significant.

The above table no.2, shows that the computed t-value came out to be (0.26) with regard to critical pedagogy (M₁=48.13, SD₁=5.66, M₂=48.35, SD₂=6.51, D=0.22, SED=0.86, df=198) P > 0.01 is not significant, as the computed t-value (0.26) is smaller (<) than the critical t-value (2.58) at 0.01 level of

significant. It means that the formulated null hypothesis gets accepted. It indicates that there is no significant difference in the secondary school teachers' inclination regarding Transformative Techno Pedagogy (TTP) with respect to critical pedagogy due to variation in gender. From the mean values, it is clear that the female secondary school teachers ($M_2=48.35$) are slightly higher than the male secondary school teachers ($M_1=48.13$) in their inclination towards critical pedagogy of Transformative Techno Pedagogy (TTP). From the SD values, it is clear that the male secondary school teachers ($SD_1=5.66$) are slightly deviated than the female secondary teachers ($SD_2=6.51$) in their inclination towards critical pedagogy of Transformative Techno Pedagogy (TTP).

The above table no.2, shows that the computed t-value came out to be (0.75) with regard to constructive pedagogy ($M_1=30.29$, $SD_1=3.35$, $M_2=29.92$, $SD_2=3.62$, $D=0.37$, $SED=0.49$, $df=198$) $P > 0.01$ is not significant, as the computed t-value (0.75) is smaller ($<$) than the critical t-value (2.58) at 0.01 level of significant. It means that the formulated null hypothesis gets accepted. It indicates that there is no significant difference in the secondary school teachers' inclination regarding Transformative Techno Pedagogy (TTP) with respect to constructive pedagogy due to variation in gender. From the mean values, it is clear that the male secondary school teachers ($M_1=30.29$) are slightly higher than the female secondary school teachers ($M_2=29.92$) in their inclination towards constructive pedagogy of Transformative Techno Pedagogy (TTP). From the SD values, it is clear that the male secondary school teachers ($SD_1=3.35$) are slightly deviated than the female secondary teachers ($SD_2=3.62$) in their inclination towards constructive pedagogy of Transformative Techno Pedagogy (TTP).

The above table no.2, shows that the computed t-value came out to be (0.12) with regard to being-in-relation & being-in-becoming ($M_1=40.1$, $SD_1=5.56$, $M_2=40.2$, $SD_2=5.9$, $D=0.1$, $SED=0.81$, $df=198$) $P > 0.01$ is not significant, as the computed t-value (0.12) is smaller ($<$) than the critical t-value (2.58) at 0.01 level of significant. It means that the formulated null hypothesis gets accepted. It indicates that there is no significant difference in the secondary school teachers' inclination regarding Transformative Techno Pedagogy (TTP) with respect to being-in-relation & being-in-becoming due to variation in gender. From the mean values, it is clear that the female secondary school teachers ($M_2=40.2$) are slightly higher than the male secondary school teachers ($M_1=40.1$) in their inclination towards being-in-relation & being-in-becoming of Transformative Techno Pedagogy (TTP). From the SD values, it is clear that the male secondary school teachers ($SD_1=5.56$) are slightly deviated than the female secondary teachers ($SD_2=5.9$) in their inclination towards being-in-relation & being-in-becoming of Transformative Techno Pedagogy (TTP).

The above table no.2, shows that the computed t-value came out to be (0.16) with regard to content knowledge ($M_1=35.79$, $SD_1=5.76$, $M_2=35.66$, $SD_2=5.83$, $D=0.13$, $SED=0.82$, $df=198$) $P > 0.01$ is not significant, as the computed t-value (0.16) is smaller ($<$) than the critical t-value (2.58) at 0.01 level of significant. It means that the formulated null hypothesis gets accepted. It indicates that there is no significant difference in the secondary school teachers' inclination regarding Transformative Techno Pedagogy (TTP) with respect to content knowledge due to variation in gender. From the mean values, it is clear that the male secondary school teachers ($M_1=35.79$) are slightly higher than the female secondary school teachers

($M_2=35.66$) in their inclination towards content knowledge of Transformative Techno Pedagogy (TTP). From the SD values, it is clear that the male secondary school teachers ($SD_1=5.76$) are slightly deviated than the female secondary teachers ($SD_2=5.83$) in their inclination towards content knowledge of Transformative Techno Pedagogy (TTP).

The above table no.2, shows that the computed t-value came out to be (0.59) with regard to pedagogical knowledge ($M_1=32.16$, $SD_1=4.8$, $M_2=31.75$, $SD_2=5.04$, $D=0.41$, $SED=0.7$, $df=198$) $P > 0.01$ is not significant, as the computed t-value (0.59) is smaller ($<$) than the critical t-value (2.58) at 0.01 level of significant. It means that the formulated null hypothesis gets accepted. It indicates that there is no significant difference in the secondary school teachers' inclination regarding Transformative Techno Pedagogy (TTP) with respect to pedagogical knowledge due to variation in gender. From the mean values, it is clear that the male secondary school teachers ($M_1=32.16$) are slightly higher than the female secondary school teachers ($M_2=31.75$) in their inclination towards pedagogical knowledge of Transformative Techno Pedagogy (TTP). From the SD values, it is clear that the male secondary school teachers ($SD_1=4.8$) are slightly deviated than the female secondary teachers ($SD_2=5.04$) in their inclination towards pedagogical knowledge of Transformative Techno Pedagogy (TTP).

The above table no.2, shows that the computed t-value came out to be (1.91) with regard to technological knowledge ($M_1=29.04$, $SD_1=3.24$, $M_2=28.03$, $SD_2=4.17$, $D=1.01$, $SED=0.53$, $df=198$) $P > 0.01$ is not significant, as the computed t-value (1.91) is smaller ($<$) than the critical t-value (2.58) at 0.01 level of significant. It means that the formulated null hypothesis gets accepted. It indicates that there is no significant difference in the secondary school teachers' inclination regarding Transformative Techno Pedagogy (TTP) with respect to technological knowledge due to variation in gender. From the mean values, it is clear that the male secondary school teachers ($M_1=29.04$) are slightly higher than the female secondary school teachers ($M_2=28.03$) in their inclination towards technological knowledge of Transformative Techno Pedagogy (TTP). From the SD values, it is clear that the male secondary school teachers ($SD_1=3.24$) are deviated than the female secondary teachers ($SD_2=4.17$) in their inclination towards technological knowledge of Transformative Techno Pedagogy (TTP).

The above table no.2, shows that the computed t-value came out to be (1.07) with regard to technological content knowledge ($M_1=24.7$, $SD_1=2.78$, $M_2=24.26$, $SD_2=2.96$, $D=0.44$, $SED=0.41$, $df=198$) $P > 0.01$ is not significant, as the computed t-value (1.07) is smaller ($<$) than the critical t-value (2.58) at 0.01 level of significant. It means that the formulated null hypothesis gets accepted. It indicates that there is no significant difference in the secondary school teachers' inclination regarding Transformative Techno Pedagogy (TTP) with respect to technological content knowledge due to variation in gender. From the mean values, it is clear that the female secondary school teachers ($M_2=24.26$) are slightly higher than the male secondary school teachers ($M_1=24.7$) in their inclination towards technological content knowledge of Transformative Techno Pedagogy (TTP). From the SD values, it is clear that the male secondary school teachers ($SD_1=2.78$) are slightly deviated than the female secondary teachers ($SD_2=2.96$) in their inclination towards technological content knowledge of Transformative Techno Pedagogy (TTP).

The above table no.2, shows that the computed t-value came out to be (0.35) with regard to pedagogical content knowledge ($M_1=42.07$, $SD_1=5.21$, $M_2=41.8$, $SD_2=5.77$, $D=0.27$, $SED=0.78$, $df=198$) $P > 0.01$ is not significant, as the computed t-value (0.35) is smaller ($<$) than the critical t-value (2.58) at 0.01 level of significant. It means that the formulated null hypothesis gets accepted. It indicates that there is no significant difference in the secondary school teachers' inclination regarding Transformative Techno Pedagogy (TTP) with respect to pedagogical content knowledge due to variation in gender. From the mean values, it is clear that the male secondary school teachers ($M_1=42.07$) are slightly higher than the female secondary school teachers ($M_2=41.8$) in their inclination towards pedagogical content knowledge of Transformative Techno Pedagogy (TTP). From the SD values, it is clear that the male secondary school teachers ($SD_1=5.21$) are slightly deviated than the female secondary teachers ($SD_2=5.77$) in their inclination towards pedagogical content knowledge of Transformative Techno Pedagogy (TTP).

The above table no.2, shows that the computed t-value came out to be (0.51) with regard to technological pedagogical knowledge ($M_1=37.79$, $SD_1=4.52$, $M_2=37.44$, $SD_2=5.21$, $D=0.35$, $SED=0.69$, $df=198$) $P > 0.01$ is not significant, as the computed t-value (0.51) is smaller ($<$) than the critical t-value (2.58) at 0.01 level of significant. It means that the formulated null hypothesis gets accepted. It indicates that there is no significant difference in the secondary school teachers' inclination regarding Transformative Techno Pedagogy (TTP) with respect to technological pedagogical knowledge due to variation in gender. From the mean values, it is clear that the male secondary school teachers ($M_1=37.79$) are slightly higher than the female secondary school teachers ($M_2=37.44$) in their inclination towards technological pedagogical knowledge of Transformative Techno Pedagogy (TTP). From the SD values, it is clear that the male secondary school teachers ($SD_1=4.52$) are slightly deviated than the female secondary teachers ($SD_2=5.21$) in their inclination towards technological pedagogical knowledge of Transformative Techno Pedagogy (TTP).

The above table no.2, shows that the computed t-value came out to be (1.99) with regard to technological pedagogical and content knowledge ($M_1=41.27$, $SD_1=4.88$, $M_2=39.84$, $SD_2=5.36$, $D=1.43$, $SED=0.72$, $df=198$) $P > 0.01$ is not significant, as the computed t-value (1.99) is smaller ($<$) than the critical t-value (2.58) at 0.01 level of significant. It means that the formulated null hypothesis gets accepted. It indicates that there is no significant difference in the secondary school teachers' inclination regarding Transformative Techno Pedagogy (TTP) with respect to technological pedagogical and content knowledge due to variation in gender. From the mean values, it is clear that the male secondary school teachers ($M_1=41.27$) are slightly higher than the female secondary school teachers ($M_2=39.84$) in their inclination towards technological pedagogical and content knowledge of Transformative Techno Pedagogy (TTP). From the SD values, it is clear that the male secondary school teachers ($SD_1=4.88$) are slightly deviated than the female secondary teachers ($SD_2=5.36$) in their inclination towards technological pedagogical and content knowledge of Transformative Techno Pedagogy (TTP).

The above table no.2, shows that the computed t-value came out to be (0.78) with regard to overall ($M_1=361.34$, $SD_1=33.62$, $M_2=357.25$, $SD_2=40.29$, $D=4.09$, $SED=5.25$, $df=198$) $P > 0.01$ is not significant, as the computed t-value (0.78) is smaller ($<$) than the critical t-value (2.58) at 0.01 level of significant. It means

that the formulated null hypothesis gets accepted. It indicates that there is no significant difference in the secondary school teachers' inclination regarding Transformative Techno Pedagogy (TTP) with respect to overall due to variation in gender. From the mean values, it is clear that the male secondary school teachers ($M_1=361.34$) are higher than the female secondary school teachers ($M_2=357.25$) in their overall inclination towards Transformative Techno Pedagogy (TTP). From the SD values, it is clear that the male secondary school teachers ($SD_1=33.62$) are slightly deviated than the female secondary teachers ($SD_2=40.29$) in their overall inclination towards Transformative Techno Pedagogy (TTP).

Null Hypothesis 2: There is no significant difference in the inclination of secondary school teachers towards Transformative Techno Pedagogy (TTP) with respect to Qualification.

Table 3: Displaying Dimension wise Significance Difference among Under Graduate and Post Graduate Teachers' Inclination regarding Transformative Techno Pedagogy.

Dimensions	Qualification Under Graduate ($N_1 = 100$)		Post Graduate ($N_2 = 100$)		D	SED	t-values
	M_1	SD_1	M_2	SD_2			
CP	47.23	6.9	48.25	5.95	1.02	0.91	1.12@
CONP	29.92	3.6	30.19	3.44	0.27	0.5	0.54@
BIR & BIB	39.76	6.19	40.61	5.85	0.85	0.85	1@
CK	34.87	5.66	35.9	5.28	1.03	0.77	1.34@
PK	31.33	4.68	31.84	4.76	0.51	0.67	0.76@
TK	28.19	4.19	28.07	4.43	0.12	0.61	0.2@
TCK	24.83	3.52	24.55	3.09	0.28	0.47	0.6@
PCK	41.5	5.22	42.02	5.42	0.52	0.75	0.69@
TPK	36.97	4.52	37.36	6.04	0.39	0.75	0.52@
TPACK	39.96	5.36	40.01	5.86	0.05	0.79	0.06@
Overall	354.56	36.22	358.8	37.96	4.24	5.25	0.81@

Note: CP=Critical Pedagogy, CONP=Constructivist Pedagogy, BIR & BIB=Beings-in-relation and being-in-becoming, CK=Content Knowledge, PK=Pedagogical Knowledge, TK=Technological Knowledge, TCK=Technological Content Knowledge, PCK=Pedagogical Content Knowledge, TPK=Technological Pedagogical Knowledge, TPACK= Technological Pedagogical and Content Knowledge, @ = Not Significant, * = Significant.

The above table no.3, shows that the computed t-value came out to be (1.12) with regard to critical pedagogy ($M_1=47.23$, $SD_1=6.9$, $M_2=48.25$, $SD_2=5.95$, $D=1.02$, $SED=0.91$, $df=198$) $P > 0.01$ is not significant, as the computed t-value (1.12) is smaller ($<$) than the critical t-value (2.58) at 0.01 level of significant. It means that the formulated null hypothesis gets accepted. It indicates that there is no significant difference in the secondary school teachers' inclination regarding Transformative Techno Pedagogy (TTP) with respect to critical pedagogy due to variation in qualification. From the mean values, it is clear that the post graduate secondary school teachers ($M_2=48.25$) are slightly higher than the under graduate secondary school teachers ($M_1=47.23$) in their inclination towards critical pedagogy of Transformative Techno Pedagogy (TTP). From the SD values, it is clear that the under graduate secondary school teachers ($SD_1=6.9$) are slightly deviated than the post graduate secondary teachers ($SD_2=5.95$) in their inclination towards critical pedagogy of Transformative Techno Pedagogy (TTP).

The above table no.3, shows that the computed t-value came out to be (0.54) with regard to constructive pedagogy ($M_1=29.92$, $SD_1=3.6$, $M_2=30.19$, $SD_2=3.44$, $D=0.27$, $SED=0.5$, $df=198$) $P > 0.01$ is not

significant, as the computed t-value (0.54) is smaller ($<$) than the critical t-value (2.58) at 0.01 level of significant. It means that the formulated null hypothesis gets accepted. It indicates that there is no significant difference in the secondary school teachers' inclination regarding Transformative Techno Pedagogy (TTP) with respect to constructive pedagogy due to variation in qualification. From the mean values, it is clear that the post graduate secondary school teachers ($M_2=30.19$) are slightly higher than the under graduate secondary school teachers ($M_1=29.92$) in their inclination towards constructive pedagogy of Transformative Techno Pedagogy (TTP). From the SD values, it is clear that the under graduate secondary school teachers ($SD_1=3.6$) are slightly deviated than the post graduate secondary teachers ($SD_2=3.44$) in their inclination towards constructive pedagogy of Transformative Techno Pedagogy (TTP).

The above table no.3, shows that the computed t-value came out to be (1) with regard to being-in-relation & being-in-becoming ($M_1=39.76$, $SD_1=6.19$, $M_2=40.61$, $SD_2=5.85$, $D=0.85$, $SED=0.85$, $df=198$) $P > 0.01$ is not significant, as the computed t-value (1) is smaller ($<$) than the critical t-value (2.58) at 0.01 level of significant. It means that the formulated null hypothesis gets accepted. It indicates that there is no significant difference in the secondary school teachers' inclination regarding Transformative Techno Pedagogy (TTP) with respect to being-in-relation & being-in-becoming due to variation in qualification. From the mean values, it is clear that the post graduate secondary school teachers ($M_2=40.61$) are slightly higher than the under graduate secondary school teachers ($M_1=39.76$) in their inclination towards being-in-relation & being-in-becoming of Transformative Techno Pedagogy (TTP). From the SD values, it is clear that the under graduate secondary school teachers ($SD_1=6.19$) are slightly deviated than the post graduate secondary teachers ($SD_2=5.85$) in their inclination towards being-in-relation & being-in-becoming of Transformative Techno Pedagogy (TTP).

The above table no.3, shows that the computed t-value came out to be (1.34) with regard to content knowledge ($M_1=34.87$, $SD_1=5.66$, $M_2=35.9$, $SD_2=5.28$, $D=1.03$, $SED=0.77$, $df=198$) $P > 0.01$ is not significant, as the computed t-value (1.34) is smaller ($<$) than the critical t-value (2.58) at 0.01 level of significant. It means that the formulated null hypothesis gets accepted. It indicates that there is no significant difference in the secondary school teachers' inclination regarding Transformative Techno Pedagogy (TTP) with respect to content knowledge due to variation in qualification. From the mean values, it is clear that the post graduate secondary school teachers ($M_2=35.9$) are slightly higher than the under graduate secondary school teachers ($M_1=34.87$) in their inclination towards content knowledge of Transformative Techno Pedagogy (TTP). From the SD values, it is clear that the under graduate secondary school teachers ($SD_1=5.66$) are slightly deviated than the post graduate secondary teachers ($SD_2=5.28$) in their inclination towards content knowledge of Transformative Techno Pedagogy (TTP).

The above table no.3, shows that the computed t-value came out to be (0.76) with regard to pedagogical knowledge ($M_1=31.33$, $SD_1=4.68$, $M_2=31.84$, $SD_2=4.76$, $D=0.51$, $SED=0.67$, $df=198$) $P > 0.01$ is not significant, as the computed t-value (0.76) is smaller ($<$) than the critical t-value (2.58) at 0.01 level of significant. It means that the formulated null hypothesis gets accepted. It indicates that there is no significant difference in the secondary school teachers' inclination regarding Transformative Techno Pedagogy (TTP)

with respect to pedagogical knowledge due to variation in qualification. From the mean values, it is clear that the post graduate secondary school teachers ($M_2=31.84$) are slightly higher than the under graduate secondary school teachers ($M_1=31.33$) in their inclination towards pedagogical knowledge of Transformative Techno Pedagogy (TTP). From the SD values, it is clear that the under graduate secondary school teachers ($SD_1=4.68$) are slightly deviated than the post graduate secondary teachers ($SD_2=4.76$) in their inclination towards pedagogical knowledge of Transformative Techno Pedagogy (TTP).

The above table no.3, shows that the computed t-value came out to be (0.2) with regard to technological knowledge ($M_1=28.19$, $SD_1=4.19$, $M_2=28.07$, $SD_2=4.43$, $D=0.12$, $SED=0.61$, $df=198$) $P > 0.01$ is not significant, as the computed t-value (0.2) is smaller ($<$) than the critical t-value (2.58) at 0.01 level of significant. It means that the formulated null hypothesis gets accepted. It indicates that there is no significant difference in the secondary school teachers' inclination regarding Transformative Techno Pedagogy (TTP) with respect to technological knowledge due to variation in qualification. From the mean values, it is clear that the under graduate secondary school teachers ($M_1=28.19$) are slightly higher than the post graduate secondary school teachers ($M_2=28.07$) in their inclination towards technological knowledge of Transformative Techno Pedagogy (TTP). From the SD values, it is clear that the under graduate secondary school teachers ($SD_1=4.19$) are slightly deviated than the post graduate secondary teachers ($SD_2=4.43$) in their inclination towards technological knowledge of Transformative Techno Pedagogy (TTP).

The above table no.3, shows that the computed t-value came out to be (0.6) with regard to technological content knowledge ($M_1=24.83$, $SD_1=3.52$, $M_2=24.55$, $SD_2=3.09$, $D=0.28$, $SED=0.47$, $df=198$) $P > 0.01$ is not significant, as the computed t-value (0.6) is smaller ($<$) than the critical t-value (2.58) at 0.01 level of significant. It means that the formulated null hypothesis gets accepted. It indicates that there is no significant difference in the secondary school teachers' inclination regarding Transformative Techno Pedagogy (TTP) with respect to technological content knowledge due to variation in qualification. From the mean values, it is clear that the under graduate secondary school teachers ($M_1=24.83$) are slightly higher than the post graduate secondary school teachers ($M_2=24.55$) in their inclination towards technological content knowledge of Transformative Techno Pedagogy (TTP). From the SD values, it is clear that the under graduate secondary school teachers ($SD_1=3.52$) are slightly deviated than the post graduate secondary teachers ($SD_2=3.09$) in their inclination towards technological content knowledge of Transformative Techno Pedagogy (TTP).

The above table no.3, shows that the computed t-value came out to be (0.69) with regard to pedagogical content knowledge ($M_1=41.5$, $SD_1=5.22$, $M_2=42.02$, $SD_2=5.42$, $D=0.52$, $SED=0.75$, $df=198$) $P > 0.01$ is not significant, as the computed t-value (0.69) is smaller ($<$) than the critical t-value (2.58) at 0.01 level of significant. It means that the formulated null hypothesis gets accepted. It indicates that there is no significant difference in the secondary school teachers' inclination regarding Transformative Techno Pedagogy (TTP) with respect to pedagogical content knowledge due to variation in qualification. From the mean values, it is clear that the post graduate secondary school teachers ($M_2=42.02$) are slightly higher than the under graduate secondary school teachers ($M_1=41.5$) in their inclination towards pedagogical content knowledge of Transformative Techno Pedagogy (TTP). From the SD values, it is clear that the under graduate secondary

school teachers ($SD_1=5.22$) are slightly deviated than the post graduate secondary teachers ($SD_2=5.42$) in their inclination towards pedagogical content knowledge of Transformative Techno Pedagogy (TTP).

The above table no.3, shows that the computed t-value came out to be (0.52) with regard to technological pedagogical knowledge ($M_1=36.97$, $SD_1=4.52$, $M_2=37.36$, $SD_2=6.04$, $D=0.39$, $SED=0.75$, $df=198$) $P > 0.01$ is not significant, as the computed t-value (0.52) is smaller ($<$) than the critical t-value (2.58) at 0.01 level of significant. It means that the formulated null hypothesis gets accepted. It indicates that there is no significant difference in the secondary school teachers' inclination regarding Transformative Techno Pedagogy (TTP) with respect to technological pedagogical knowledge due to variation in qualification. From the mean values, it is clear that the post graduate secondary school teachers ($M_2=37.36$) are slightly higher than the under graduate secondary school teachers ($M_1=36.97$) in their inclination towards technological pedagogical knowledge of Transformative Techno Pedagogy (TTP). From the SD values, it is clear that the under graduate secondary school teachers ($SD_1=4.52$) are slightly deviated than the post graduate secondary teachers ($SD_2=6.04$) in their inclination towards technological pedagogical knowledge of Transformative Techno Pedagogy (TTP).

The above table no.3, shows that the computed t-value came out to be (0.06) with regard to technological pedagogical and content knowledge ($M_1=39.96$, $SD_1=5.36$, $M_2=40.01$, $SD_2=5.86$, $D=0.05$, $SED=0.79$, $df=198$) $P > 0.01$ is not significant, as the computed t-value (0.06) is smaller ($<$) than the critical t-value (2.58) at 0.01 level of significant. It means that the formulated null hypothesis gets accepted. It indicates that there is no significant difference in the secondary school teachers' inclination regarding Transformative Techno Pedagogy (TTP) with respect to technological pedagogical and content knowledge due to variation in qualification. From the mean values, it is clear that the post graduate secondary school teachers ($M_2=40.01$) are slightly higher than the under graduate secondary school teachers ($M_1=39.96$) in their inclination towards technological pedagogical and content knowledge of Transformative Techno Pedagogy (TTP). From the SD values, it is clear that the under graduate secondary school teachers ($SD_1=5.36$) are slightly deviated than the post graduate secondary teachers ($SD_2=5.86$) in their inclination towards technological pedagogical and content knowledge of Transformative Techno Pedagogy (TTP).

The above table no.3, shows that the computed t-value came out to be (0.81) with regard to overall ($M_1=354.56$, $SD_1=36.22$, $M_2=358.8$, $SD_2=37.96$, $D=4.24$, $SED=5.25$, $df=198$) $P > 0.01$ is not significant, as the computed t-value (0.81) is less ($<$) than the critical t-value (2.58) at 0.01 level of significant. It means that the formulated null hypothesis gets accepted. It indicates that there is no significant difference in the secondary school teachers' inclination regarding Transformative Techno Pedagogy (TTP) with respect to overall due to variation in qualification. From the mean values, it is clear that the post graduate secondary school teachers ($M_2=358.8$) are slightly higher than the under graduate secondary school teachers ($M_1=354.56$) in their overall inclination towards Transformative Techno Pedagogy (TTP). From the SD values, it is clear that the under graduate secondary school teachers ($SD_1=36.22$) are slightly deviated than the post graduate secondary teachers ($SD_2=37.96$) in their inclination towards Transformative Techno Pedagogy (TTP).

Conclusion of the study

The following conclusions were drawn from the data analysis:

1. The study shows that overall level of Inclination towards Transformative Techno Pedagogy (TTP) is average among secondary school teachers in Itanagar Capital Complex of Arunachal Pradesh. The study also reveals that secondary school teachers have average level of positive attitude towards Transformative Techno Pedagogy. This may be due to having the knowledge of various modern trend of pedagogical practices for transforming the teaching and learning environment which makes their teaching more interactive and enjoyable as well as motivate the learners to become a responsible citizen along with mastery over the subject matter. The teachers may have more opportunity to interact with the modern trend of pedagogical practices that may have helped in developing positive attitude among secondary school teachers.
2. There is no significance difference between male and female secondary school teachers' inclination towards Transformative Techno Pedagogy (TTP) in Itanagar Capital Complex of Arunachal Pradesh. The study reveals that both male as well as female secondary school teachers had same positive attitude in terms of their inclination towards Transformative Techno Pedagogy (TTP). This could be due to their similar understanding of transformative pedagogy and techno pedagogy, which they may acquire from attending numerous seminars and workshops, as well as they have common concern for implementing contemporary pedagogical trends in the classroom.
3. There is no significance difference between the under graduate and post graduate secondary school teachers' inclination towards Transformative Techno Pedagogy (TTP) in Itanagar Capital Complex of Arunachal Pradesh. The study reveals that both under graduate as well as post graduate secondary school teachers had same positive attitude in terms of their inclination towards Transformative Techno Pedagogy (TTP). This might be because they have same concern for integrating modern pedagogical trends in the classroom and have a similar understanding about the importance of transformational pedagogy and techno pedagogy in teaching and learning process, which they acquire up by attending a lot of seminars and workshops.

Educational Implications of the study

Transformative techno pedagogy is one of the most recent modern pedagogical practices in the current era. Hence, the current study makes a significant contribution to raising positive attitude towards transformative techno-pedagogy in the state and throughout the country. The study will help teachers, curriculum developers, policymakers, educational administrators and numerous research groups to build up positive attitude toward transformative techno pedagogy in the current teaching situation. A significant contribution to the development of transformative techno pedagogy related programs in India has also been made by the current study. Teachers' professional growth and development will certainly be supported through the variety of skill development programs that can be organized including workshops, seminars, symposiums, meetings, and practical training which enhance their positive attitude regarding transformative techno pedagogy as well as equip them to deal with changes in pedagogical practices as well as

technological advancements in worldwide. It gives more support to the teacher training institutions, refresher courses and guidance & counselling programs for integrating transformative pedagogy and techno pedagogy related contents and activities into the curriculum to enhance positive attitude towards the implementation of updated pedagogical practices in the classroom environment. Due to lack of physical infrastructural facilities teachers do not have positive attitude towards the implementation of transformative techno pedagogy in the classroom situation so, this study can help the educational administrators for providing the infrastructure needed to ensure the smooth implementation of updated pedagogical practices in teaching and learning process, like sufficient digital classroom, access to Wi-Fi, speedy internet, inverters, digital computers, and so on to enhance the positive perceptions regarding the implementation of transformative techno pedagogy. Teaching with transformative techno pedagogy improves the effectiveness of content presentation, hence this study will help the teachers as well as administration to bring effectiveness in curriculum transaction. Assessment of teachers' inclination towards transformative techno pedagogy has certain benefits, including the ability to delve into a teacher's intentions, expertise, cognitive process and principles, which can be beneficial for their self-examination and formative purposes. It was revealed from the study that inclination towards transformative Techno-Pedagogical of secondary school teachers have a positive attitude and there is no significant difference with respect to gender, types of management, qualification and subject specialization, therefore the use transformative Techno-Pedagogical with their positive attitude will helps teachers to enhance their teaching style and efficiency.

Recommendations of the Study

1. To improve the usage of technology in schools, equipment and software should be readily available along with moral support from the authority.
2. To ensure an excellent standard of technology-based teaching, learning facilities should be provided to trained the teachers to become competent while dealing with the modern technology as well as updated pedagogies.
3. A common orientation program must be organized for teachers to understand and retain their transformative techno- pedagogical knowledge
4. A specific orientation and refresher course programme should be established to sustain teachers' teaching effectiveness as well as teaching style.
5. Seminars, workshops and other extension activities for teachers should be developed to investigate the relationship between transformative techno-pedagogical competences with teacher's teaching effectiveness.
6. Transformative techno-pedagogy related contents and activities should be included in both pre-service and in-service teacher training curricula.
7. The Govt. of India as well as Arunachal Pradesh shall take on the responsibility to build up appropriate pedagogical practice for teaching in both government and non- government secondary schools by implementing various programs based on modern pedagogical practices for effective teaching.

8. Higher education institutions should take the responsibility in enhancing the implementation of transformative techno pedagogical practices as a mandatory for each and every teacher while teaching in the classroom.
9. Educational institutions should find out vulnerable teachers and organize various awareness campaigns to raise teacher's understanding about transformative techno pedagogy.
10. Creative and innovative thinking skills of teachers are one of the lacking areas. So, to enhance teachers' creative and innovative thinking skills there must be learning packages for teachers.

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