Transformative Pedagogy: A Paradigm Shift in Higher Education

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Abstract: **In the old pedagogies, a teacher's quality was assessed primarily in terms of their ability to deliver content in their area of specialisation. Pedagogical capacity was secondarily important; its development in colleges of education varied a lot by country and culture. In most places, "teaching strategies" overwhelmingly meant direct instruction. In recent decades, technology has been layered on top of content delivery and used primarily to support students' mastery of required curricular content. The question of what and how students should learn has been occupying a central place in debates on education in many countries in the Asia-Pacific region (UNESCO, 2014). A relevant education is not limited to a classroom, but seeks to contextualize the issues by the surrounding areas and people as parts of the learning environment. With the introduction of ICT and online education, there is a considerable potential for increase and a transformation from a simple classroom to complex virtual classrooms with participants collaborating irrespective of time and place.**

Transformative pedagogy is defined as an activist pedagogy combining the elements of constructivist and critical pedagogy that empowers students to examine critically their beliefs, values, and knowledge with the goal of developing a reflective knowledge base, an appreciation for multiple perspectives, and a sense of critical consciousness and agency.

A transformative pedagogy underlies and contributes to the extent of the change, as more argue for a range of analytical and context-related skills to be developed in students. To operationalize education associated with sustainability, teaching approaches must focus on elements relating to the processes of learning, rather than the accumulation of knowledge—to develop graduates with capabilities to improvise, adapt, innovate, and be creative.

Thus, the following research questions emerged,

What is the impact of transformative pedagogy on fostering in-service teachers' transformative learning? What practices of transformative pedagogy impact student transformative learning? The Faculties from 3 private universities of Baroda were the sample for study. The Questionnaire was sent by Google forms and some of the faculties were interviewed and their opinion was noted related to transformative pedagogy. The data was collected from 150 faculties of different streams. The data collected through questionnaire was analysed quantitatively, keeping in mind the significance of the study whereas the interviews and opinionnaire was analysed qualitatively.

The purpose of the current article is to revisit transformative pedagogy in order to redefine its units of analysis, its objectives and its methodologies, in a way that would make it more meaningful in the context of today's knowledge driven society.

Key words: **teaching approaches, transformative pedagogy, sustainability, accumulation of knowledge**

I. INTRODUCTION

The question of what and how students should learn has been occupying a central place in debates on education in many countries in the Asia-Pacific region (UNESCO, 2014). In response to these debates, countries in the region are increasingly introducing various policy changes and curricula reforms. Such reforms recognize that existing curricula are not suitable for the needs of learners in the twenty-first century, and seek to introduce learning that will prepare people of the region to live peacefully and sustainably in a rapidly changing world (UNESCO, 2015). Reforms in curricula and in pedagogical practices have broadened in scope and magnitude in recent decades by integrating social dimension into the teaching of science, mathematics and technology (Olson et al., 1999). In addition, pedagogical innovations have been explored using information and communication technology at the school level (Harris, 2002; Janicki and Liegle, 2001; Martinez-Garcia et al., 2012; Hargis, 2001; Mioduser et al., 2003; Wu et al., 2008; Law, 2006). Reforms of pedagogy have also been driven by theories of progressivism and human learning and development, such as socio-cultural models of human learning, as well as by theories about pedagogical content knowledge in the design of learning activities and community practices (John and La Velle, 2004; Ferdig, 2006; Goodyear and Casey, 2015). Reforms have also had an effect on teacher education (Peers et al., 2003; Koh et al., 2013; Laferriere et al., 2006; Michalova et al., 2002; Moon et al., 2003). The studies into future needs suggested that a gap exists between the current outputs of the education system and society's education needs, but that this could be bridged by a multipronged approach that involves making changes to curricula, teacher supply and training, infrastructure and technology (Lee et al., 2009; Yun et al., 2007).Thus, then the question arises as, How can education include the dialogue and actions necessary to create this kind of change? What role can transformative learning play in creating a more sustainable future? Concerns about the state of the world are echoed in concerns about higher education."Sustainability is about the terms and conditions of human survival, and yet we

still educate at all levels as if no such crisis existed" (Orr, 1992, p. 83). growing number of academics are concerned with the current trends of society and call for a transformative shift in what universities teach and how universities create and regard knowledge production. In Sustainable learning we need to focus on all type of skill, i.e cognitive or non-cognitive which would lead the recipients for knowledge gaining.

II. TEACHING AND LEARNING OF NON-COGNITIVE SKILLS

Non-cognitive skills (NCS) are increasingly considered important to student learning outcomes. Gutman (2013, p. 4) defines NCS as follows: Non-cognitive skills are those attitudes, behaviours, and strategies which facilitate success in school and workplace, such as motivation, perseverance, and self-control. These factors are termed 'non-cognitive' as they are considered to be distinct from the cognitive and academic skills usually measured by tests or teacher assessments. Non-cognitive attributes are skills and traits that are not specifically intellectual or analytical in nature. These skills are not directly related to specific subject and content. They include a range of personality and motivational habits and attitudes that facilitate functioning well in school and life, such as life skills, critical thinking, peaceful living, value-based living, perseverance, motivation, self-control, and other aspects of conscientiousness (Rosen, Glennie, Dalton, Lennon, and Bozick, 2010)

The eight non-cognitive skills that are considered by Gutman (2013, p. 7) as being key competencies in the twenty-first century are as follows:

1. Self-perception;
2. Motivation;
3. Perseverance;
4. Self-control;
5. Meta-cognitive strategies;
6. Social competencies;
7. Investigate and research;
8. Resilience and coping;
9. Creativity

Fiji's National Curriculum Framework, similarly, presents nine key characteristics that enable school graduates to 'participate in a changing world' (Ministry of Education, Culture and Arts, 2013, p. 6) These are as follows:

1. Communicate effectively;
2. Handle change;
3. Make wise decisions;
4. Be innovative and enterprising;
5. Learn how to learn;
6. Solve problems;
7. Realize that learning is lifelong;
8. Participate in team work and cooperative learning

III. COGNITIVE SKILLS

Cognitive skills are concerned with knowing and thinking. It studies the structures and components for processing information. The fields of study encompassed are memory, attention, perception, language, reasoning, problem solving and creativity (Elliott et al., 2000). The cognitive foundation of learning theory was initially based on the study of human 'memory', and it takes 'mental representation' as a central proposition.

The various instruction modes appropriate for the student traits. They are Direct teaching evasive, competitive, dependent Individualized teaching evasive, competitive, dependent Peer learning participatory, cooperative, independent/dependent Cooperative learning participatory, cooperative(intra team), competitive(inter team), independent Sport education participatory, cooperative(intra team), competitive(inter team), independent Inquiry learning participatory, cooperative, independent Teaching games for understanding evasive, competitive, dependent.(Min et al., 2012, p. 267.)

IV. TRANSFORMATIVE PEDAGOGY

With regards to the nature of knowledge, knowledge in the traditional transmission model is defined as a set of information waiting to be acquired. In transformative learning, knowledge does not exist as a given truth before the process of learning. Students develop knowledge as a result of their inquiry, action or experimentation. In terms of the teaching and learning process, the teacher in a transmission system of education works as content expert and positions himself or herself the primary or only source of knowledge. The teacher organizes and delivers information and procedures and expects students to throw back the given ideas. The teacher is deemed effective if he or she is able to present information in a clear and comprehensive way. The lecture format is the preferred and most often used method in class. Students appear passive and are hardly encouraged to question the information. On the other hand, the teacher who is engaged in transformative learning works with the students' questions about a particular topic. The teacher facilitates the students' identification of questions and develops with them a plan for answering their questions. While the teacher's own expertise remains a valuable resource, the teacher also employs a wide variety of resources and interventions to help students understand the questions they need to ask and change or deepen their own prior knowledge. The teacher challenges students to uncover facts and concepts in interdisciplinary contexts and build knowledge by observing, hypothesizing, experimenting, and discovering.

The teacher prompts students to take risks and explore multiple viewpoints by interacting and collaborating with one another. The teacher is considered effective if through such activities, the students are able to accomplish their plan of inquiry and consequently, change or deepen their prior

knowledge. With this process of collaborative inquiry, self-assessment and reflection, students lay the foundations for lifelong learning. For students to succeed, the teacher has to create' an atmosphere in the classroom that enhances the students' sense of self-worth, increases their self-confidence and motivation to do their best and affirms their efforts towards self-improvement. The teacher also has to make the students feel that they can discuss or test their ideas, and questions freely without fear of being reproached, embarrassed or reprimanded. With this supportive atmosphere, the teacher is able to encourage critical and creative thinking and the expression of a variety of viewpoints and approaches to different issues or problems. One of the main criticisms of these practices is that they encourage rote instead of meaningful learning. In a system of transmission, such tests would be expected since instruction consists mainly of providing factual information and prescribing procedures. But within the perspective of transformative learning, results from such tests yield little information about the kind of cognitive growth that has taken place in the students, the changes that have occurred in their conceptual representations, or their ability to solve problems in the field. The application of the framework's focus on trans formative learning in the classroom will not be easy nor immediate due to varied factors such as administrative concerns.(e.g. class size, the trimester schedule, facilities), preparation of students for board or licensure exams, and faculty load and readiness. Transitioning from a system of transmission to transformation will bring about changes in curriculum design, syllabus construction, lesson planning, use of class time, grading system, faculty evaluation and others.

V. IMPLICATIONS OF THE LITERATURE REVIEWED

In the book Transformative Learning: Educational Vision for the 21st Century, O'Sullivan (1999) suggested that a radical shift in education is necessary if we are going to create change agents who can put an end to the current ecological crisis. He envisioned the ecological crisis as a cue for moving education in a transformative direction at all levels. Mezirow (1997a) explained transformative learning as a process of effecting change in a frame of reference. Taylor (1997) concluded that the practices for fostering transformative learning are theoretically based and there is a need for more emphasis on the practical aspects of transformative learning in the classroom. He also suggested that more research is needed in the areas of cultural diversity and the role of critical reflection in transformative learning. . Bushe and Khamisa (2004) found that many of these studies represent organizations that exhibited signs of transformation consistent with transformative learning resulting from appreciative inquiries. At the organizational level, these transformations consist of a major shift in the state of being or the identity of the organization, development of persistent generative metaphor, and development of a new set of background assumptions.

According to Mezirow, TL is a transformation of meaning schemas, which takes place through three reflective processes: critical self-reflection, reflective dialogue, and reflective action, and they occur over ten stages. These transformations result in the acquisition of new perspectives, attitudes, and behaviors integrated into new roles and relationships as these changes are integrated into the subject's life (Mezirow 1978; 1990; 1991; 2000). These transformations are evident both to the participant and to others.

Most of the researches reviewed are mainly based on Mezirow's transformation theory. From the researches studied it is clear that the teachers have to change as per the time and demand. Earlier teachers were only the source of Knowledge to the students, but time has changed now, there are many knowledge sources. Therefore, a teacher has to be more a facilitator. Thus, there is a need for transformation in terms of perspective, attitude and behavior which cannot be taught by other sources but the teacher. For sustainable learning these are the main things which can be inculcated in the students. The studies also revealed that there is more a need of practical learning than the theoretical, this will boost the students with lifelong experiences.

VI. RESEARCH CONTEXT

Gujarat state is situated on the West coast of India between 20.1 and 24.7 degrees North latitude and 68.4 and 74.4 degrees East longitude. The boundaries of Gujarat are surrounded by the Arabian Sea in the West, Rajasthan in the North East, Madhya Pradesh in the East and Maharashtra in the South East. It shares a common border with Pakistan on the Northern side. After Indian independence in 1947, all of Gujarat except Saurashtra and Kutch became part of Bombay state. However, the Bombay state was bifurcated into States of Maharashtra and Gujarat on May 1960.

Gujarat has population of 6.04 Crores, an increase from figure of 5.07 Crore in 2001 census. Total population of Gujarat as per 2011 census is 60,439,692 of which male and female are 31,491,260 and 28,948,432 respectively. Urban population of the state is 42.6% whereas rural population is 57.4%. Sex ratio is 919 and literacy rate is 78.03 % in which male literacy is 85.75 % and female literacy is 69.68 %. (census,2011).

India's higher education system is the second largest in the world in terms of enrolment and largest in Terms of number of institutions, with 29.6 m students Enrolled in over 48,500 institutions.(AISHE 2012 −13). Gujarat has noted 44 universities, 10 research institutes and 8 institutes of national importance. Above these Gujarat boasts of 6 institutes of national importance, including IIM A, IIT, SVNIT, NID, PRL and EDI.

Type of Higher Education Institutions in Gujarat

Table- 1

Central University	Institutes of National Importance	State Public Universities	State open Universities	State Private Universities	Deemed University Private	Deemed University government aided	Total
1	2	25	1	18	1	1	49

Vadodara, one of India's most cosmopolitan cities, is located to the south east of Ahmedabad, on the banks of river Vishwamitri and the district is referred to as the "SanskarNagari" (City of Culture) due to its rich cultural traditions & Vadodara is famous for its palaces, parks, temples and museums known as the 'Gateway to the Golden Corridor', as all the rail and road arteries that link Delhi, Mumbai and Ahmedabad also connect Vadodara, including the Delhi Mumbai Industrial Corridor (DMIC), Focus Industry Sectors, Chemicals & Petrochemicals, Pharmaceuticals and Biotechnology. The district has 12 talukas, 15 towns and 1,548 villages, of which the major towns are Vadodara (District Headquarter), Savli, Waghodia, Padra, Dabhoi, Karjan and Sankheda.

Gujarat's leading educational institutions are located in Vadodara district, offering skilled and intellectual manpower in abundance for various industries and R&D activities.

VII. RESEARCH QUESTIONS

- What is the impact of transformative pedagogy on fostering in-service teachers' transformative learning?
- What practices of transformative pedagogy impact student transformative learning?

VIII. OBJECTIVES OF THE STUDY

- To study the perception of Teachers in Higher Education towards Transformative Pedagogy
- To study the impact of Transformative Pedagogy on Quality improvement in Higher Education.

IX. DELIMITATION OF THE STUDY

There are total 14 private Universities in Gujarat state. There are 4 private Universities in Vadodara district. The study is delimited to 3 private universities in Vadodara.

X. METHODOLOGY

The present study is a school survey type of Study in which the researcher collected the necessary data from the large sample.

A. Population

The population of the present study comprise of all the Private Universities in Gujarat state.

B. Samples for the present study

The data collected from Sample for the study consists of 150 Faculties of different streams from 3 private Universities of Baroda.

C. Data Collection

Data was collected with the help of interviews, opinnionaire and a questionnaire. The faculties of different streams were interviewed related to implementation of transformative pedagogy in the university and its impact on improving the Quality of teaching and learning in Higher Education.

D. Data Analysis

interviews and opionnaire was analysed qualitatively and the responses collected with the help of questionnaire were analysed quantitatively with the help of descriptive statestics. Qualitative as well as Quantitative data was triangulated to reach to the generalizations.

XI. ANALYSIS OF THE STUDY

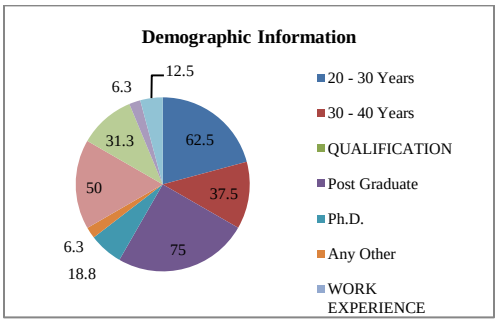
The questionnaire was analyses on following dimensions:

1. Demographic profile
2. Existing system in education
3. Teaching and learning process in adopting transformative pedagogy
4. Teaching and learning process adopted by teachers should focus on improving the competencies
5. Various transformative pedagogical activities
6. The different learning approaches that can be used for teaching and learning
7. Challenges in adopting transformative pedagogy
8. Transformative pedagogy can help students and faculties
9. Assessment in Higher Education

Table-2

DIMENSIONS	Mean	Std. Deviation	Std. Error Mean
Achievement for sustainable change	25.0	1.76	.44
Improving competencies among students	25.8	1.22	.30
Transformative pedagogical activities	13.7	1.12	.28
Learning approaches	17.9	1.94	.48
Factors affecting quality of Education	17.8	1.54	.38
Challenges	22.9	3.41	.85

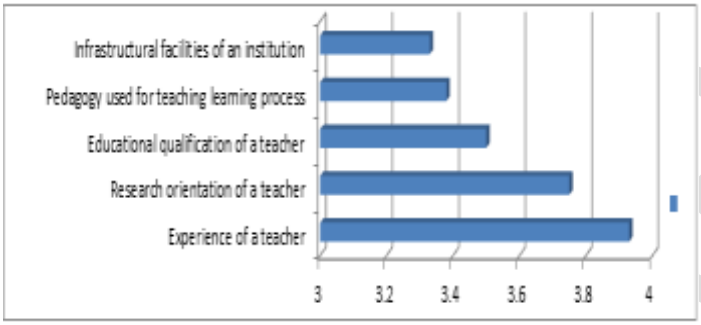
Graph 1



From the above graph it is clear that most of faculties teaching in private universities of Baroda are young, between the age of 30-40 years, post graduates and have 5-10 years of work experience. But while speaking to them it was clear that the teaching pedagogy should be a transformative pedagogy with different challenges and methods of teaching .

A. Existing System in Higher Education

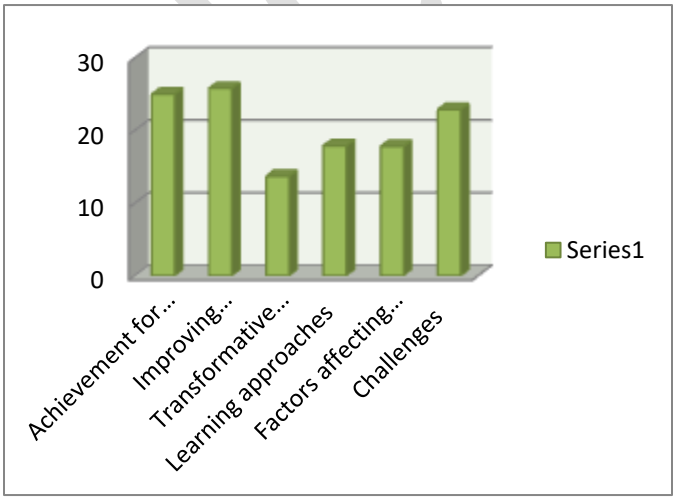
Graph 2



The above graph shows that to shift to transformative learning pedagogy the respondents preferred experience as a teacher in higher education.

B. Overall Results of Transformative Learning Pedagogy

Graph: 3



The above graph shows that most of the faculties of private universities in Vadodara strongly agreed that the teaching learning process adopted by the teachers should focus on improving the competencies of the students.(M=25.8).

XI. FINDINGS OF THE STUDY

The major findings of the study are:

1. Most of the faculties in the private universities of Baroda were young and receptive. It was found that they wanted to actually implement the concept of transformative pedagogy. But they lack in appropriate knowledge related to it.
2. The researchers also found that the faculties mainly felt that experience as a teacher would help them to adopt the methods of transformative pedagogy and also expressed that there is a need to adopt transformative pedagogy so as to stop the routinised mechanical environment, for reducing the race/competition among the students, students can be exposed to various subjects, linking students learning with practical ability, due to advancement in technology as well as the learners seek diverse learning through diversified professionals; and changing tradition of current job market.
3. It was also found that most of the faculties agreed that the role of the teacher should be as one who demonstrates awareness of how his/her actions affect both others and the environment as well makes choices to contribute to common good.(M=2.9)
4. The respondents also expressed that the teachers should mainly focus on improving the competencies of the students such as, the ability to inquire, communication skills, ability to utilize information, creativity, perseverance and self-control.
5. The respondents shared that various transformative pedagogical activities can be conducted in the class by using group effectively and by using positive reinforcement.
6. It was also found during interaction that most of the faculties use different learning approaches such as, peer learning, co-operative learning, teaching games for better understanding and also inquiry learning. Through which they can help the students to learn better and sustain the learning.
7. The respondents strongly agreed that transformative learning can help the faculties in improving their quality of teaching in the areas such as systematic thinking, partnership for change, collaborative learning and participation.
8. The respondents also shared that assessment is an important aspect for quality improvement in Higher Education. Therefore, the students for sustainable learning should be assessed on Non- academic activities in the education tenure and group work and co-operative learning(M=2.8), they should also be

assessed on co-curricular approach and transformative skills in the student.

9. The respondents expressed whole heartedly that for transformative learning pedagogy and sustainable learning environment it is necessary for the teachers to reach out to the average and below average students mass, Teachers should get freedom to adopt and practice newer methods , Quality of students in terms of aptitude, knowledge and self effectiveness needs to be accelerated, group discussions and group presentations can be adopted, industry interaction, vestibule training, industry internships, practical teaching & demonstration should also be the methods of teaching.
10. Thus, it was found that to incorporate transformative pedagogy in Higher Education it is very important for the teachers to help the students increase their competencies.

XII. CONCLUSION

"The classroom remains the most radical space of possibility in the academy. For years it has been a place where education has been undermined by teachers and students alike who seek to use it as a platform for opportunistic concerns rather than as a place to learn". (hooks, 1994). Thus, the paradigm shift from traditional learning to transformative learning will provide a platform to the students and the teachers to show their abilities, potentials and capabilities. The role of the teacher is help the students in improving themselves in this journey so that they would be confident, strong and stubborn in their future. The researchers are concerned that transformative learning and sustainability education will become an important word and that academics will recognize the personal changes in students as well as in teachers taking place. If we are truly interested in social transformation toward a more sustainable future, then we need to consider the entire system of Higher Education to transform for better learning experiences.

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