Teaching Learning System in Higher Education:
A Paradigm Shift

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"To learn is to change. Education is a process that changes the learner."
– George Leonard

Abstract:

Teaching and learning started from ancient period and it always transferring knowledge to the next generation. This process will continue as long as human being survival in the earth. Learning takes place directly or indirectly in different forms of education from ancient to modern era. In changing socio-economic scenario, the whole educational process has undergone a tremendous change. Students and teachers take responsibility to make the quality in higher education. The most significant issue relating to learning and teaching process in higher education is paradigm shift. This change illustrated the way where curriculum redesigned and technology is used in present era. The quest for paradigm shifts in higher education has more practicable. This is because the development of emerging technological teaching aids in higher education that playing vital role in current quest for paradigm shift.

Keywords: *Teaching and learning, development, paradigm, teaching aids, higher education.*

1. Introduction:

The higher education system in today's scenario is faced with many challenges i.e., competiveness, management, financial and so many others program by laying equal emphasis on quality of higher education. In the 21st century higher education can be used as a powerful tool to build the knowledge-based society. Higher education should be viewed as a long-term social investment for the promotion of socio cultural development, economic growth, and equity. Indian higher education system can address itself to the global challenges through maintaining the right balance between the need and the demand also challenging in teaching, research another activity. A teacher can change the teaching and learning into a game with his teaching styles. Teaching is not only on activity of the mind but also a function of the heart. In this way teacher as a magician who helps to dream of success in life. The role of teacher as well as school and higher education institution is to focus on learning strategy and to support the learner by innovative ideas. Teacher must prepare his lesson according to different techniques so that students may enjoy the study. The last decades of 20th century also cleared the picture of educational institutions and its innovative teaching learning processes.

Every person cannot be a teacher if he is properly not skilled with the teaching profession. As we know that Socrates gave quiz method for learning and teaching. Aristotle once said that 'For the things we have to learn before we can do them, we learn by doing them' and also suggested that education which can provide practical knowledge will be useful.

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Every teacher should start his lesson by real example and must finish it by teaching the use and application of it. Today it is very much needed to insert understanding with ability for application of knowledge. In this physical and humanistic world changing is the only unchangeable and it takes place in all fields including teaching and learning process. Teaching and learning takes place from ancient period and it always transferring knowledge to the next generation. Here, to make the learners comfortable and enjoy the learning betterment of traditional teaching and learning from new technology and methodology are needed to adopt the new paradigm. There are lots of factors leads behind to think about paradigm shift in teaching and learning, it includes such as globalization, industrialization, population explosion, social changes etc.

The Education Commission (1964-66)[1] of India submitted a comprehensive report suggesting for establishing a uniform national structure of education that covering all stages and aspects of education. It stressed on the necessity of professional preparation of teachers for qualitative improvement of education. National Council for Teacher Education was set up for the maintenance of standards and improvement of the quality of teacher education in the country. The council engages to put the effort for improving the quality of teacher preparation in the country and also to ensure planned and coordinated development of teacher education. Constructivism is relatively a new paradigm which exerts major theoretical influence on the present education system. It is effective way of teaching and learning. The present scenario of teaching and learning is changed due to high access of students, information, knowledge and influence of different methods, many researches in the field of learning and teaching.

2. Review of Related Literature:

Chormal, V. S. & Saini, J. R. (2013)[2] focused to their study on impressive transformation which has taken place in paradigm shift of education owing to use of technology. In this researchers stated that paradigm shift is the result of mix of old and best of the new. This study considers differentiation between the new and old learning paradigm. This study also considered technology as the focal point in learning. The study founded that fundamental shifts in the educational landscape are moving from teacher centered to learner centered learning and from the traditional to technology centered learning environment.

Singh, B & Mishra, B. (2017)[3] in their study advocates on the innovative changes of the teaching and learning. In this study researchers point out the role of teacher in teaching learning and gives quantitative information about the influence of effective teacher in democratic classroom for the academic achievement of a learner. Researcher suggested some changes for

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[1]Bawa, B. (n.d.). Kothari Education Commission. Retrieved from
https://www.yourarticlelibrary.com/education/kothari-education-commission-1964-66/76816

[2] Chomal, V. S. ,& Saini, J. R. (2013). A Study and Analysis of Paradigm Shift in Education Triggered by Technology. *International Journal of Research in Economics & Social Sciences,* 3(6), 14-28. Retrieved from https://www.researchgate.net/publication/281965273_A_Study_and_Analysis_of_Paradigm_Shifts_in_Education_Triggered_by_Technology

[3]Singh, B., & Mishra, P. (2017). Process of Teaching and Learning: A Paradigm Shift. *International Journal of Education*, 7(10), 31-38. Retrieved from https://www.sg.inflibnet.ac.in/Jspui/bitstream/10603

implementation of new paradigm i.e., curriculum, constructive approach, behavioural change, educational tour etc. Conclusively this study states planning is much needed to teaching and experience of the learners taken as future need.

3. Objectives:

The objective of the study is as follows-
- i) to know the concept about paradigm and paradigm shift.
- ii) to understand the different teaching methods involve in teaching-learning process.
- iii) to know the various changes in teaching learning system in higher educational institution in respect to paradigm change.
- iv) to know the role of the teacher in paradigm shift in teaching-learning system.

4. Discussion:

4.1 Paradigm and Paradigm Shift:

Paradigm is a distinct set of concepts or thought patterns, including theories, research methods, paradigm may be defined as a set of theories and empirical methodologies which allow a scientific community to identify frame and solve problems and serve as a foundation for future scientific discoveries. Paradigm shift is a major change in the concepts and practices of how something works or is accomplished. A paradigm shift can happen within a wide variety of contexts. Dramatic changes in methodology or practice. It often refers to a major change in thinking and planning, which ultimately changes the way of thinking that are implemented. They very often happen when new technology is introduced that radically alters the production process of a good or service. Paradigm shifts happen in a wide range of other contexts to describe a profound change in model. For example, the Internet created a paradigm shift in the way of teaching learning as well as business purpose. Email and scan replaced the fax machine and courier services.

The term paradigm is another word for pattern. Pattern forming is part of the way we attempt to make meaning from our experiences (Ausubel, 1968)[4]. When a paradigm shift takes place, we see things from a different perspective as we focus on different aspects of the phenomenon in our lives. In twentieth century, paradigm shift across a wide variety of fields can be seen as part of a larger shift from positivism to post-positivism.

4.2 Methods involve in Teaching-learning Process:

4.2.1 A review growth of teaching and learning:

Teaching and learning was started from our ancestor and it will continue as long as human being survival in the earth. The technologies are reflected in all fields of teaching learning process. In

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[4]Jacobs, G. M., & Thomas, S. C. (2001). Paradigm Shift: Understanding and Implementing Change in Second Language Education. *The Electronic Journal for English as a Second Language,* 5(1). Retrieved from https://www.tesl-ej.org/ej17/a1.html

general technology makes human comfortable in all field and in education it helps the teaching learning became better than previous acquiesce. To understanding this need is to understand the contribution of technology in teaching learning.

i) **Technology in Education:** The utilization of hardware and software products in teaching and learning process is known as technology in education. Such as pen, paper, type writer, TV, radio Xerox machine, teaching machine, computer, mobile, internet etc.

ii) **Technology of Education:** The method or way of teaching is known as technology of education. It includes both traditional and modern methods such as speech, lecture method, memorizing, debate, peer tutoring, project, assignment, seminar, workshop, field study etc.

A huge constructive changes and developments have taken place in the national and international arena in social, economic, cultural, scientific and technological spheres as well as in information and communication technology sectors in recent years. Over the last two decades there have been fundamental shifts in the way of teaching and learning are perceived and conducted within the education sector. One is teacher centered to student centered and another is traditional to the virtual classroom. Technology can help to facilitate the knowledge-constructed views, technology as having an influential effect on the teaching and learning processes. These developments have affected on teaching learning system, as well as teacher education programme that help to review and reform of the teacher education system.

4.3 Changes of Teaching Learning System in Higher Education:

4.3.1 Recent steps towards new paradigm:

National Curriculum Framework (2005)[5] emphasizes constructivism and recommends that curriculum should help learners to become constructor of knowledge and emphasizes active role of teachers in relation to the process of knowledge construction according to the textbooks at primary education level. They are the subset of school education and social interactions. Learning is what according to constructivism such as-

(i) Learning means interpretation of new experiences by the individual through own experiences.
(ii) Learning is internal process.
(iii) Learners are totally active in learning process.
(iv) Change in behaviour is due to personally interpretation of facts, concepts and generalization.
(v) Stresses on meaningful learning.
(vi) Teaching-learning methods are learner-centered.
(vii) Learning process is much important than learning outcome.

4.3.2 Understanding the Paradigm Shift in teaching learning:

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[5]NCERT.(2005). National Curriculum Framework, 2005. Retrieved from https://ncf2005.files.wordpress.com/2010/02/prelims-1.pdf

The old paradigm of teaching is based on John Locke's assumption that the untrained student mind is like a blank sheet of paper waiting for the instructor to write on it. Because of this and other assumptions, educators have often thought of teaching in terms of several principal activities:

(i)   Transferring knowledge from teacher to student.

(ii) Filling passive, empty vessels with knowledge.

(iii) Classifying students by deciding who gets which grade

(iv) Conducting education within a context of impersonal relationships among students and between teachers

(v) Maintaining a competitive organizational structure.

(vi) Assuming that anyone with expertise in a field can teach.

The old paradigm is to transfer teachers' knowledge to passive students so teachers can classify and sort students in a norm-referenced way through competition. Many teachers consider the old paradigm the only possibility. Lecturing while requiring students to be passive, silent, isolated, and in competition with each other seems the only way to teach. The old paradigm is carried forward by sheer momentum, but teaching is changing. The old paradigm is being dropped for a new paradigm based on theory and research with clear applications of learning and instruction. Teaching in terms of the several different principal activities such as-

(i)   Students construct, discover, transform, and extend their own knowledge.

(ii) Teachers and students work together, making education a personal transaction

There is a general rule of instruction. Learning results when individuals cooperate to construct shared understandings and knowledge. Teachers must be able to build positive relationships with students and create the conditions within which students build caring and committed relationships with each other.

4.3.3 Introduction to Learning Paradigm:

"Instruction Paradigm/ Teaching Paradigm" has been dominating for a long time in education. In recent years the accents are being transferred to learning, to motivation of self-learning. It has been realized, that it is impossible to teach if the person doesn't want to or is not able to do this himself. Barr and Tagg (1995)[6] argued that the mission, vision, culture and structure of higher educational institutions must undergo a paradigm shift from *instruction paradigm* to the *learning paradigm,* from being an institution that provided instruction to students to an institution that produced learning in students. Once that shift is made, everything has the potential for change. In the new perspectives the teacher maintaining a learner centered environment. Curriculum design is based on an analysis of what a student needs to know.

i) **Curriculum:** The curriculum is the basic for all level in education; therefore, an active and well-balanced curriculum can arouse the interest of students with the fulfillment of their

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[6] Barr, R., & Tagg, J. (1995). From Teaching to Learning: A New Paradigm for Undergraduate Education, 27(6), 13-25 Retrieved from https://www.esf.edu>tlc>...pdf

needs. A curriculum that provides skill-oriented practice and empirical knowledge that is useful to support futuristic planning of teaching and learning for the institutions.

ii) **Constructive approach:** A teacher should be a good practitioner of their profession. Today there are so many innovations which are taking place in the area of teaching and learning. Teachers, who were teaching on the blackboard, now are teaching on the computer where colorful images appear in many types with multi-dimensional vision. Now a day's teacher is present everywhere owing to the availability of the internet, and other social websites.

iii) **Change in behavior:** Now today there are no conventional boundaries with the teaching and learning. Because education has become child centered. Today it is expected from the teacher as friend of learner who takes equal part in every co-curricular activity and also the teacher behaved like a father. Therefore, a teacher must change in his behaviour and functioning according to learner's choice and need.

iv) **Educational tour:** Educational tour is the concept which provides empirical and real knowledge. Today, it is essential to understand the psychology of the learner. Therefore, possible historical places, science exhibitions, libraries, museums, book fares etc. must be shown by the relevant teacher with the proper guide in the area.

v) **Playing movies in classrooms:** Today the teachers developing a new concept of playing educational, scientific, historical, conceptual and sometimes animated movies in the classroom to create curiosity in the mind of the learner. Because he can help to concentrate the student on the topic to learn. By the movies, the teacher wants to give the real knowledge of learning by fun and also gives knowledge about the technology that how cans it work.

vi) **Spaced learning:** It is the method where a teacher provides some breaks after teaching. But in this type of method brain storming techniques are used to develop insight. The break may be according to the choice of learners like they can play a game, can hear songs, can see the movie, etc. After a short break, teacher again repeats the topic only to understand the concepts.

vii) **Learner autonomy:** Learner autonomy is linked to Vygotsky's concept of self-regulation. Learner autonomy involves learning how to learn. It can enhance the learning strategy and act as a driver of learner engagement. In the field of teaching learning process it involves learners being aware of their own ways of learning. Intrinsic motivation plays a central role in learner autonomy.

viii) **Cooperative Learning:** Cooperative learning is a successful teaching strategy in which small teams, each with students of different levels of ability, use a variety of learning activities to improve their understanding of a subject. Cooperative learning also known as collaborative learning. It consists of a range of concepts and techniques enhancing the value of student-student/ student-teacher interaction.

ix) **Teacher as Co-learners:** In this concept teacher as co learners involves in learning along with the students. Teacher must take part in this process for their student.

x) **Teaching Strategies:** The teaching strategies can be categorized in convergent and divergent teaching. The convergent teaching is teacher centered and structured, but divergent teaching is child centered where active alertness of learner is important. In this respect learning as categorized into four process according to Kolb(1999)[7]-

    a) Divergent learning (related to Innovation and imagination);
    b) Assimilation learning (related to empirical and inductive knowledge);
    c) Convergent learning (related to application of ideas and problem solving);
    d) Accommodation learning (related to intuition and trial and error).

Table 1: Development of New Learning Paradigm

Traditional	Present	Benefits
Static	Dynamic	Methods of producing, transmitting and restoring the quality that improved the presentation of materials.
Impassive	Supportive	Well-designed computer-based learning also scope for remedial teaching
Single Medium	Multi media	The imaginative use of a wide range of media that provide attractive learning
Synchronous	Asynchronous	a shift to self-paced learning using a variety of support mechanisms
Passive	Active	Learning will be seen as an active process
Unidirectional	Interactive	Interactivity offers scope for benefits in clarification, elaboration and consolidation
Real	Virtual	Considerable scope for linking theory and experiment in teaching and technology.

4.4 Role of Teacher:

The teacher must teach with the proper planning. It suggests that the experiences of the learner should be planned so that he can use in future when need. According to John Dewey, a teacher should know the ways and techniques to motivate the learner and to create interest for learning. Following steps can be useful for the teachers and learners to change the knowledge in experiences through cognition-

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[7]McLeod, S. A. (2013). Kolb - Learning Styles. Retrieved from www.simplypsychology.org/learning-kolb.html

i) Teacher must motivate the learner intrinsically to activate self.
ii) Every individual must be taught according to their needs.
iii) Education must be according to running and current context and highlights the real situation or phenomenon.
iv) The teacher should never be fixed the teaching techniques and behaviour.
v) Cooperative learning should be promoted.
vi) Teaching and learning must be well planned.
vii) Education must do enable to the learner to use his experiences.
viii) A teacher must be served as helper, motivator, guide, supervisor and arranger of experiences.
ix) Teacher must prepare the content and study material according to universal needs.

Table 2: Teacher role basis of uses the teaching model

Traditional Model of Teaching	New Model of teaching
Classroom Lectures	Individual Exploration
Teacher as deliverer of Information	Teacher as Guide
Individual work	Collaborative Learning
Face to face teaching	Flexible and distance learning

5. Conclusion:

Conclusively we found that, the education that cannot help to the learner to prepare for life must be removed from the curriculum. Most importantly by attempting to implement change in a holistic way, the chances of success greatly increase. In higher education, teaching methodology has become more communicative, testing remains with the traditional paradigm. In recent years technology has significantly affected in global, and its presence is strongly felt in education sector especially in higher education sector. A shift from information-based to experience-based and from the traditional instruction domination to newer constructiveness orientation is seen. Now the success depends on effectiveness of curriculum in higher education. Change is never easy; change requires time, an open mind, ability to learn, adapt, try, and make mistakes. When the educational paradigm changes from teachers teaching to learners learning, all learner will be able to acquire language and literacy in their own best way.

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