# NEW TEACHING METHODOLOGY AND STYLES IN RESPONSE TO 21ST CENTURY LEARNERS

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**ABSTRACT-** With the changes of society, new methods of teaching and learning have emerged to cope with the situation for betterment of teaching and learning, and we have started to adopt new methods of teaching and learning in our teaching learning process. The 21<sup>st</sup> century is primarily an Information and Communication Technology (ICT) age in which we can obtain all information with the click of a single button; the entire world has become a global village to us. Education is very dynamic in nature, so with the time period, the teaching methodology and techniques of teaching should also be changed according to the needs of the students. Now the digital platform is one of the convenient, cost-effective mediums for learning and it makes our lives easier and learning takes place faster than before. This paper is written with the help of secondary data sources. For the purpose of this study, the researchers use literature review and content analysis. Throughout the paper, the researchers emphasised 21<sup>st</sup> century learners and new teaching methodology and styles in response to 21<sup>st</sup> century learners.

Keywords: Teaching learning, 21st century, Teaching methodology, Information and Communication Technology (ICT), Dynamic, Convenient, Cost-effective, Methods and techniques of teaching

#### I. INTRODUCTION

This is the era of ICT (Information and Communication Technology), and if we look back 50 years, we can see that the educational system has changed very quickly in these years. Learning is a psychological phenomenon that involves the modification of our behavior. Using an individual as an example, we can better understand the concept of learning. Many prominent psychologists and educationists have provided different stages of development of an individual. Piaget explained that some learning traits (Schemas) are inborn, and the child is born with those learning. Family is the first place where the child starts to learn all the basic skills which help the child to survive in the world. That's why family is considered as one of the most important mediums of learning. This is the starting point for an individual's learning. Then the child starts to go to school and starts to learn about society and advanced life skills. Teachers play an important role in educational institutions because an individual will not receive proper education or learning if he or she does not have a teacher or Guru. In our ancient educational system, the teacher or Guru holds the highest position and is regarded as one of the most honoured members of society. The system of education, the methods and techniques of teaching were also very different from present days. At that time, students had to stay in the guru's house to achieve education. Society and education are both changing phenomenons and dynamic in nature. When society changes, new methods of learning are also introduced, and we start to adopt that learning method in our living pattern. Now the digital platform is one of the convenient, cost-effective mediums for learning and it makes our lives easier and learning takes place faster than before. But one thing we need to understand is that without knowledge, learning is not effective. Most of our learning occurs unconsciously, and it eventually becomes a part of our life, and it is reflected in our behavioral pattern, which we call compulsive behavior, and it is difficult to change. Using social media and playing video games on our mobile phones are examples of compulsive habits that began with simple learning but later became habituated to living. However, with proper guidance and instruction, we can learn the right thing with proper knowledge, and in that regard, teachers also play a significant role these days. That's why we should mention compulsive habits or learning patterns, because nowadays, maximum use of technology gradually reduces the importance of the physical presence of teachers from educational institutions. Proper learning can take place when there is an emotional bonding between the teacher and the taught. Otherwise, learning becomes very monotonous and boring for the students. These are some of the important points regarding the adaptation of new methods and techniques of teaching. The main aim and objective of an educational institution is to bring the best knowledge and learning to the students or the learner. That effectively happens when the instructor or the teacher is properly trained or has the knowledge of the new trends and methodology of teaching.

#### II. REVIEW OF RELATED LITERATURE

Kim et al. (2019) conducted research on improving 21st-century teaching skills. The development of competencies known as 21st-century skills is garnering increasing attention as a means of improving teacher instructional quality. However, a key challenge in bringing about desired improvements lies in the lack of context-specific understanding of teaching practices and meaningful ways of supporting teacher professional development. This paper focused on the need to measure the social quality of teaching processes in a contextualized manner. It was mentioned in the study that the classroom is the space where learners observe the modeling of skills by their teachers. If teachers do not know how to identify teaching practices, they certainly will not know how to model them. This is a critical issue not only for observational training but also for feedback and professional development of teachers and a fundamental reason why identifying culturally relevant manifestations of teaching practices is necessary. Having observers, practitioners, and/or teachers study classrooms from their own cultures (whether through live observation or videos) has been supremely important for successful training, rater reliability, and overall relevance of the tool [8]

**Kivunja, C. (2015).** The research paper on, Innovative Methodologies for 21st Century Learning, Teaching and Assessment: A Convenience Sampling Investigation into the Use of Social Media Technologies in Higher Education. This paper contributes two prospects in two ways. First, it articulates the theoretical framework drawn from the work of luminaries in pedagogy that posits cooperative, social learning strategies, as potential methodologies for effective pedagogy. Second, it describes the results of a convenience sampling case study, which investigated the use of cutting-edge social media technologies, namely Google + Discussion Circles, (GDCs), to shed some light on how the use of these social media technologies supported teaching, learning and assessment activities for 2nd year Bachelor of Education students at a university in Australia. The research found, inter alia, that when students were given the opportunity to learn using Google + Discussion Circles, (GDCs), the majority took advantage of the academic, social and structural dynamics created by these technologies in many ways that supported their learning, assessment activities and overall academic outcomes.<sup>[9]</sup>

Mynbayeva et al (2018). Conducted a research study on, Pedagogy of the Twenty-First Century: Innovative Teaching Methods, In the twenty-first century, significant changes are occurring related to new scientific discoveries, informatization, globalization, the development of astronautics, robotics, and artificial intelligence. This century is called the age of digital technologies and knowledge. The goal of this research chapter was to summarize current changes in didactics for the use of innovative teaching methods and to investigate teachers' understanding of these changes. In this research chapter, the researchers considered four areas: the expansion of the subject of pedagogy, environmental approach to teaching, the digital generation and the changes taking place, and innovation in teaching. The theory of education, figuratively speaking, has two levels. At the macro-level, in the "education-society" relationship, decentralization and diversification, internationalization of education, and the introduction of digital technologies occur. At the micro-level in the "teacher-learner" relationship, there is an active mix of traditional and innovative methods, a combination of an activity approach with an energy informational environment approach, cognition with constructivism and connectivism. [12]

Boholano, Helen B. (2017). Conducted a research study on Smart Social Networking: 21st Century Teaching and Learning Skills, Education in the 21st century highlights globalization and internationalization. Pre-service teachers in the 21st century are technology savvy. To effectively engage and teach generation Z students, pre-service teachers will help the educational system meet this requirement. The educational systems must be outfitted with a prerequisite of ICT resources, both hardware and software, and curricula must be designed to promote a collaborative learner-centered environment to which students will relate and respond. This study determines the 21st century skills possessed by pre-service teachers in terms of social networking. Pre-service teachers use computers in very advanced ways, but educators must remember that they still need guidance to use technology safely

and effectively. Through social media, pre-service teachers can use a multitude of applications, including Web 2.0, for their projects. Smart social networking requires critical-thinking skills and the ability to integrate and evaluate real-world scenarios and authentic learning skills for validation.<sup>[3]</sup>

Jansen, Cecelia., Merwe, Petro van der. (2015). Conducted a research study on Teaching Practice in the 21st Century: Emerging Trends, Challenges and Opportunities, Digital technology for teaching practice students means the ability of student teachers to use digital artifacts as an integral part of their pedagogical content knowledge. Student teachers also need to be aware of what implications this has for teaching and learning strategies plus the building aspects in the lesson presentation. A new approach to teaching practice, calibrated for the 21st century, requires teachers to be willing to assist the student teachers in this regard. Because they inherit a complex set of global dilemmas, the teaching practice period is intended to expose student teachers to the most sobering technological frontier in history, emphasizing the rationale of this study. The proposed study aims to prepare teaching practice students for the classrooms of the future. Teachers often express their lack of confidence in their digital technology skills and this can implicitly affect their attitudes towards the use of digital technology in their teaching. As a result, the presenters argue that in the fast-paced digital environment of the current millennium generation, teaching practice students should be empowered. Teachers often do not expect learners to share knowledge through connections. This is a key aspect of learning in the digital age within a connectivist learning theory. The empirical research has been conducted in an interpretive qualitative paradigm underpinned by a complexity theory conceptual framework. Convenience sampling has been used in this study. One teacher from each of the three secondary schools in Gauteng has been selected to participate. This study has challenged the participating teachers to reflect on their own teaching praxis when using digital technology as an integrated part of their pedagogical content knowledge. One of the outputs of this research study was a model for teachers to use as an example for training teaching practice students. This model can also be a source of information for digital technology literacy education. The intention is to guide teaching practice students to develop their own programmes for digital technology literacy to meet the teaching demands of the 21st century. [7]

Laar, Ester van. et al. (2020). Conducted a research study on Determinants of 21st-Century Skills and 21st-Century Digital Skills for Workers: A Systematic Literature Review, This study brings attention to the determinants of 21st-century skills and 21st-century digital skills. The following skills are investigated: technical, information, communication, collaboration, critical thinking, creativity, and problem-solving skills. To understand differences in the level of these skills among workers, we need to know the factors that determine an individual's skill level. A systematic literature review was conducted to provide a comprehensive overview of empirical studies measuring skill determinants. The results showed that there was a strong need for research on determinants of communication and collaboration skills. In a digital context, determinants for creativity and critical thinking are hardly studied. Furthermore, the identified determinants of 21st-century skills studies are limited to personality and psychological determinants, neglecting, for example, social determinants such as social support. Although digital skills studies showed more variety, they mostly covered demographic and socioeconomic determinants. [11]

#### Significance of the Study

Before going to give an explanation about the importance of teaching, we have to understand the meaning of teaching. Teaching is a kind of art, and to perform any art we need a set of expertise and skills for that and those skills and expertise come through proper training and practice. Different groups of theorists have given different definitions and explanations about the teaching. According to behaviourists, teachers are the highest and supreme in the classroom. Teachers are more knowledgeable than students, where teachers transfer knowledge and experience to the students. Students are the passive learners in the classroom. In this case, teachers know everything and the learner or students knows nothing and whose duty is to simply listen to everything from the teacher and have to follow all the instruction and guidance given by the teacher. But according to cognitive science, it is very different and quite relevant for today's teaching and learning. Cognitive science believes that teachers and students can learn together in the classroom. Teachers are the guides in the classroom, and they facilitate the necessary arrangements for the students for better learning and teaching. In this case, we can mention the various methods of learning and teaching, one of which is the collaborative method. In cognitive science, the main concern is to construct knowledge by students based on their own experiences of life. In this regard, we can mention the concept of learning by doing, where teachers are the instructor and facilitator and students or the

learner is the main active part in the learning process. The main focus of today's learning is based on constructivism. Effective teaching, however, is impossible without proper instruction and experience because students have all of the capacities and abilities; all that is required is to provide a proper environment, support, and assistance in acquiring knowledge, skills, a positive attitude, life values, and so on. But without motivation, the right amount of effort will not come from the students, and the right learning will also not be possible. Again, in this context, we can understand the importance of a teacher or instructor in the classroom. Teaching is considered one of the noble professions in society. Teachers are nation builders. Only teachers have the ability to effect revolutionary change in society. While family, society, and community are all important in their own right, teachers and education are unique in their own right. Based on the work of the Partnership for 21st Century Skills, the framework for 21st century learning described in this action tool is built on a foundation of academic subject knowledge that students apply through the essential skills of critical thinking and problem solving, creativity and innovation, communication, and collaboration (Beers, 2011).<sup>[1]</sup> Teachers and teaching should be changed from time to time and make teaching and learning more effective and efficient. This will be the main duty of any teacher who is involved in the teaching profession, to update about all changes and look after the needs and importance of the learner.

#### **Objective of the Study**

The main objective of the study is to understand and analyse new teaching methodology and styles in response to 21st century learners.

# Methodology of the Study

This research paper is basically descriptive and content analytical in nature. The data used in it is purely from secondary sources according to the needs of the study. Information collected from the publications of journals, articles, books and educational websites, is extensively used.

# III. DISCUSSION AND FINDINGS

# 21st Century Learners

The 21st century is mainly the era of the information age where we can get all the information with the click of a single button; the whole world becomes a global village to us. Education is very dynamic in nature, so with the time period, the method and techniques of teaching should also be changed according to the needs of the students. Using the instructional planning tools, teachers can create a well-rounded set of learning opportunities that incorporate key aspects of 21st century literacies into their lessons. In the 21st century, each tool includes step-by-step instructions, suggestions for integrating technology, and reflection questions that promote students' metacognition (Beers, 2011).<sup>[1]</sup> The present educational system is called a child centric education where students are the main focus, but in the earlier days, teachers were the main focus and highest part of the teaching learning process. Most importantly, the digital movement of teaching is one of the remarkable developments in our educational system.

# Adaptations of New Mindset, Methods and Techniques of Teaching by the Teacher in the $21^{\text{st}}$ Century

Now we come to the most important part of our discussion, which is the adoption of teaching methods and techniques in this era. In the present scenario of life, the use of technology in all aspects is very significant and becomes part and parcel of our life. Without technology, life would be incomplete, and we would be unable to do anything because we use technology at every moment of our lives, from waking up to going to bed, and it makes our lives more convenient and easier than in the past. So, in this concern in the educational aspect, the use of technology is also very significant and important. Now the system of education is mainly based on technology and its usability. Teaching is not a simple process; it needs proper proficiency and expertise. Because of this, the adoption of new methods and techniques of

teaching is very important. Some of the important strategies should be adopted by all teachers to cope with the modern learner and effective learning and teaching. These are:-

1. **Knowledge of philosophy:**-Philosophy is the mother of all sciences. Without it, no subjects would exist in the world. Proper philosophical understanding is very important for every teacher before entering the field of teaching, because without it, a teacher may not find the true meaning of teaching as well as the true love for his or her profession. Practical knowledge is required for teaching, but without strong theoretical knowledge about philosophy, it will not efficiently work in the practical field of teaching, because it teaches us the way of life, makes us more curious to know, which is the main aim for any teacher in the world. Let's take the example of the Gandhian philosophy of education, According to him; there are two main aims of education, the immediate and the ultimate. Immediate aims which are related to the materialistic world, the bread and butter aim, the cultural aim, the social aim, the harmonious development, the moral aim of education etc. The concept of learning by doing is also another remarkable contribution idea given by Mahatma Gandhi. The ultimate aim is the highest aim for any individual in the world. That will come by truth, non-violence and realization of self. This is only one example of philosophical idea or knowledge; there are an endless number of such ideas and knowledge about teaching and learning. When we have knowledge about all these philosophies, it will make our teaching more effective and beneficial for the students.

The philosophical basis of education must be clear in the mind of the teacher in education at the very outset. Philosophy is a contemplative subject. Studying philosophy helps one to make a deep realization of life and its work. It makes the aim and objective and ideal of life and work more appropriate, precise and clear in mind. Without philosophy, life and its goals are bound to be a game of trial and error, liable to commit mistakes in every step and make it difficult to reach the goal. Thus, Philosophy must guide and direct one in setting the right ideal to proceed in the right direction.

Philosophy can provide us with a clear understanding of the contemplation of a higher power, bring us into the spiritual realm, and provide us with a pure understanding of self-realization, but one thing we must be clear about is that spirituality is Universality, not religiosity. It makes us more efficient and helps us to lead a meaningful ideal life. So it is clear that without philosophical knowledge, life will never grant us the permission to live a value-based life, and life will never grant the teacher the permission to instill real moral values in the students, which is very lacking nowadays in the learner, because gradually we forget about our roots, scriptures, traditions, cultures, and their significance in our lives, and without proper understanding, it would not be difficult to lead a successful career in the field of teaching. It only shows the teacher to set the right goal for the students, because it develops intuitive ability about life and can guide us to proceed in the right direction.

1. **Knowledge of Psychology:** - Psychology is commonly known as the science of mind or behaviour. Education also means training of the mind and behaviour of the learner. Obviously, education and psychology are identical subject matters of study. Teachers' education is supposed to bring about ideal and desirable changes in the behavior of the students in accordance with the hopes and wishes of society. The scientific and systematic ways and means of bringing about such changes in the behaviour of individual students is the jurisdiction of psychology. Thus, all the educational thoughts, ideals, principles, hopes, wishes, and problems are being systematically studied and their acceptable solutions found out by the use of psychology. It adopts the steps of objective observation and experiment for that. Psychology is, in fact, the practical and workable side of education. As an applied and experimental branch of education, a new subject allied to 'educational Psychology' has come into being and has gained more prominence at present.

From these lines, it is very clear that knowledge of psychology is very essential for the teacher to teach effectively in the classroom. For proper learning, emotional bonding and empathetic behaviour between teacher and taught is very important, without it, the understanding of the pupils is not possible. In any classroom, all the learners are not alike. Everyone has their own uniqueness in regard to their personality, intelligence, ability, capability, emotional stability, creativity, problem solving ability etc. Most importantly, when one teacher possesses the knowledge of psychology, then the teacher can understand the need and importance of the students and then only pure learning will take place for the students.

Knowledge of Information and Communication Technology (ICT):- In the 21st century, technology has become part and parcel of our life. ICT plays a very significant role in the field of education. ICT gives the opportunity to access a variety of information sources within a minute. It becomes easy to communicate with students from any place, any time with the help of ICT. It helps teachers to communicate with thousands of students at the same time with the help of different tools of technology. For example, digital learning has become one of the significant mediums to educate the learner in a very effective manner. Information technology is a type of technology which performs various types of activities such as collecting, sorting, processing, retrieving, using and transmitting this information with maximum accuracy and efficiency in enriching the knowledge of the user in decision making within a minimum time. Information technology shares and interchanges knowledge, mental skills, motor skills and attitudes etc. among users through the use of electronic mass media. Communication means exchanging ideas or information through sending messages or otherwise. Dewy defines communication as a process of sharing experiences to modify the disposition of both. During this pandemic situation, it becomes difficult to teach or take classes as before. Now, ICT has emerged as one of the most powerful mediums for sustaining the educational process. ICTs can present content in an engaging and attractive form in education to the learner. ICT helps teachers to record and constantly monitor the progress of each student. It allows customized delivery of relevant education materials to each individual learner. It can build virtual social communities among different educational institutions, teams of teachers and students. It provides the opportunity to facilitate learning-to-learn skills. The latest innovations in ICTs (mobile tools, cloud solutions, etc.) allow us to implement continuous learning processes in different learning contexts and provide on-demand support to students.

So, from the above lines, it is very clear that teachers have to possess the right amount and updated knowledge about technology and its usability in the classroom. Traditional methods of teaching are no longer effective because smart classrooms are more important than simple classrooms; for example, "a picture is worth a thousand words," and giving lectures in the classroom is not as effective as using a picture or a motion picture in the classroom. With this idea, with the help of technology, many new methods and techniques of teaching are introduced in the teaching learning process.

These are the three main dimensional knowledge fields that all teachers should have in order to improve their teaching and adopt new methods and techniques of teaching in the classroom, as well as to deal with 21st century learners.

Important methodologies and styles of teaching in response to 21st century learners:-

- 1. **Collaborative Teaching Learning Methods:-** Collaborative teaching learning methods are primarily concerned with learning in a group or groups, in which the teacher and students both actively participate in the teaching learning process, such as solving problems, tasks, or all other activities, and both the teacher and the teachers are the active participants in the process of teaching and learning.
- 2. **Experiential Teaching Learning Method:**-This method is mainly used to get practical knowledge about the problem, where the teacher tries to give conceptual knowledge about the problem on the basis of learning by doing, such as laboratory activities or sometimes tour and excursion, also considered as experiential learning.
- 3. **Peer-Tutoring:-** In every classroom, peers play a very important role for any student, because the child spends most of his or her time with their peers, so peer tutoring means teaching each other on the basis of their understanding of the subjects. For example, if Ram is good at English and Sam is good at Mathematics, but Ram is not good at English and Sam is not good at Mathematics, then they can share. When someone is good at something, he or she may share his or her knowledge with the class.
- 4. **Self-Evaluation:-** It is the self-reflective method of learning, where students can measure their progress and get the opportunity to identify their weaknesses and strength and can improve according to that.
- 5. **Content and pedagogical expertise:**-Without content expertise, proper teaching and learning will never take place, creating a gap between teachers and teachers that is not acceptable in the process of teaching learning. That's why pre-service and in-service teacher training are very important to enter into the field of teaching and cope with the modern teaching learning process.
- 6. **Evolution and Feedback:-** Proper evaluation, assessment and feedback are very important for teaching and learning. Without proper evaluation and assessment, the progress of the students is not

possible because only a positive evaluation and assessment makes the students more aware of their progress and their improvement.

Feedback is the backbone of any teaching. Without it, teaching will not continue further and also the part of motivation of both teachers and students may no longer remain.

- 7. **Blended learning method:**-Blended learning combines classroom learning with online learning and offline learning in which students can control the part of time and place of learning. Blended learning is the combination of both the teaching learning methods online and offline.
- 8. **Flipped classroom:**-In this strategy, conventional classroom-based learning is inverted so that students are introduced to the learning material before class, with classroom time then being used to deepen understanding through discussion with peers and problem solving activities facilitated by the teacher.
- 9. *Cooperative teaching:*-This is also a very important method of teaching. Here, students and teachers are corporately engaged in the classroom to get the proper concept of the content.
- 10. **Reciprocal teaching:**-It is one of the interesting methods of teaching and learning where teacher and students both actively participate in the classroom teaching. After class or in between classes, the teacher plays the role of student and the student plays the role of the teacher in the classroom. It develops emotional bonding between teachers and students and both get the benefits from each other.

Besides these above-mentioned methods of teaching and learning, seminars, conference workshops, role playing and simulation, project methods etc are also highly recommended to be adopted in the 21st teaching learning system.

### IV. CONCLUSION

The above mentioned discussion has given us a clear picture of the nature of the 21st century learner and also given us the idea about the adaptation of different methods and techniques of teaching. We are considered the best creatures in the universe because we have the ability to distinguish between right and wrong, make decisions, and, most importantly, we are able to learn anything with our intelligence and intellectual abilities. Without learning, the meaning of life can not be defined or explainable. Our society and culture are both important aspects of who we are as humans who live in a changing world. To understand these entire complex phenomenons, we need to have a proper education, which makes us civilised and differentiated from all other creatures in the world. With this measurable attainment, we call this era the 21st century and we are adopting new methods and techniques in all aspects of our lives. In this information era, we have to be very careful in concerning our educational system and our learners, because education is the only one medium which gives us the real meaning of life. Education teaches us life skills. The *teachers* and the *gurus* of all the educational institutions are responsible for transmitting all the valuable knowledge to our learners that can make our nation proud and we can live the life we want, a peaceful world. Collaborative, experiential, blended teachings etc are the important methodologies and strategies to make our teaching learning more efficient according to the needs of the 21st century learner.

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