Research Paper

ICT Awareness and Attitude towards Creative Teaching

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ABSTRACT

Information and Communication Technology (ICT) awareness and attitude towards creative teaching in India are a crucial aspect of modern education. The role of Information and Communication Technology (ICT) in education is multifaceted and transformative. Nowadays we are improving ICT awareness and promoting creative teaching in India. This structure provides a comprehensive framework for exploring ICT awareness and attitude towards creative teaching in India. By integrating ICT into education, we can create a more inclusive, effective, and engaging learning environment that prepares students for success in the digital age. The role of Information and Communication Technology (ICT) in creative teaching is significant. By leveraging ICT, teachers can create engaging, student-centered, and creative learning environments that foster imagination, critical thinking, and problem-solving skills. By addressing these challenges and opportunities, India can foster a more creative and effective teaching environment, leveraging ICT to enhance student learning outcomes.

Keywords: ICT Awareness, Attitude, Creative Teaching

The explosion of digital technology has created a revolution in educational instruction. ICT stands for "Information and Communication Technology". The flexibility, high speed and huge storage capacity of ICT is causing teachers to redefine and rethink the traditional process of teaching.

ICT refers to the convergence of computing, communication, and information technologies to create new technologies, applications, and services that enable users to access, create, store, manage, and communicate information in various forms, such as text, images, audio, and video.

In other words, ICT encompasses a broad range of technologies used to create, store, manage, communicate, access and process. Information in various forms, using digital devices, networks, and software applications such as computing devices (e.g., computers, laptops, mobile devices), communication technologies (e.g., internet, telephony, video conferencing), information technologies (e.g., software applications, data storage, databases) and digital media (e.g., text, images, audio, video). The term ICT is often used

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interchangeably with IT (Information Technology), but ICT is a broader term that includes both IT and communication technologies.

It refers to a range of technologies, which includes computers, computer work situations, display facilities, hardware, software, recording and processing system for sound, still and moving pictures, graphics, calculations and a range of communication facilities.

It can also be said as the collective term for various technologies involved in processing and transmitting information, using computer and other electronic devices. The digitization of information, particularly the educational information with the help of ICT can be called as the fifth revolution in education. ICT can provide the access to information sources, enable communications, create interacting learning environment and promote change in methods of teaching.

Attitude is an important concept to understand human behaviour. It is defined as a complex mental state involving beliefs and feelings. Creativity is one of the key aspects of humanity. It is a complex, yet important educational outcome. Creativity is the construction of a product that is both, novel and useful within a social context.

When creativity is fostered into educational contexts it inspires and supports the student success, increase personal and social engagement through learning and lead to greater student satisfaction and higher levels of self-efficacy (Robison, 2011).

Creative teaching is a communication process between teachers and students, which is perceived by the students as novel and valuable in helping them to develop and to be ready to face new challenges. In creative teaching, rote memory and blind imitation are not encouraged, whereas special emphasis is laid on independent thinking. It also benefits student engagement and improve student achievement, allowing and encouraging cross-fertilization among ideas and subject areas-which promote self –initiated learning. Creative teaching involves individuals regularly in participation in activities that engage creative, innovative and imaginative cognitive processes.

The creative teaching process includes use direct methods of developing creativity, such as using an inquiry-discovery or problem-solving approach. It deliberately provides students with hands-on opportunities to generate new ideas, and enhance complementary skills such as fluency, flexibility, elaboration and originality (Fasco, 2001).

These teaching methods engage students in problem-solving activities and provide situations and opportunities for students to answer questions through research, practical trial-and-error challenges, and positive reinforcement from the instructor. Creative teaching is always constructive. Efforts are made to ensure that students do not remain passive listeners only. On the other hand, they are encouraged to acquire knowledge actively. It includes the teacher's new ideas, self-evaluation, self-reliance, new opinions, new experimentation and teacher's willingness to advance new ideas which are basic to creativeness.

Attitude towards Creative Teaching
Creative teaching refers to an innovative and imaginative approach to teaching that encourages students to think critically, solve problems, and explore new ideas. It involves using unconventional methods, resources, and activities to make learning engaging, interactive, and fun. Characteristics of creative teaching include:

- Flexibility: Adapting to students' needs and interests.
- Imagination: Using innovative and original approaches.
- Risk-taking: Encouraging experimentation and exploration.
- Student-centered: Focusing on students' needs and interests.
- Interdisciplinary: Integrating multiple subjects and disciplines.
- Technology integration: Leveraging technology to enhance learning.
- Real-world connections: Relating lessons to practical, real-world scenarios.
- Collaboration: Encouraging student teamwork and peer learning.
- Feedback: Providing constructive feedback to foster growth.
- Reflection: Encouraging students to reflect on their learning process.

Creative teaching aims to develop essential skills like critical thinking, problem-solving, creativity, communication, collaboration, adaptability and emotional intelligence. By adopting creative teaching methods, educators can inspire students to become active learners, think outside the box, and develop a lifelong love for learning.

Definition and importance of creative teaching are explanation of creative teaching and its significance in modern education and benefits of creative teaching, such as enhanced student engagement and deeper learning.

Current trends and practices in creative teaching are overview of creative teaching methods used in Indian classrooms (e.g., project-based learning, flipped classrooms, gamification) examples of successful creative teaching initiatives.

Barriers to adopting creative teaching methods are teacher resistance to change and lack of confidence in using new methods, limited resources and infrastructure support and examination-oriented culture and emphasis on rote learning.

Teacher attitudes towards creative teaching are survey or research findings on indian teachers' attitudes towards creative teaching and factors influencing teacher attitudes, such as training, experience, and school culture.

Impact of ICT on creative teaching attitudes is awareness and adoption influence teachers' attitudes towards creative teaching and examples of ICT tools and resources that support creative teaching.

Strategies to Promote Positive Attitudes towards Creative Teaching are Professional development and training programs for teachers, encouraging collaboration and knowledge-sharing among educators and recognizing and rewarding creative teaching practices.

By exploring these subtopics, you can gain a deeper understanding of the attitudes towards creative teaching in India and how ICT awareness can support or hinder the adoption of creative teaching methods.

REVIEW OF LITERATURE IN INDIAN AND FOREIGN STUDIES

Indian studies such as Manisha (2012) studied the attitude of secondary school teachers on using new technologies in Northern Goa. The sample was drawn from150 secondary school teachers working in 45 schools. The study showed that there is no difference in attitude by

gender or experience but significant difference was noticed with respect to age, computer ownership and computer experience of the respondents.

Shah (2005) did a study on ICT awareness, use and need of secondary and higher secondary teachers of English medium schools of Varodara city, Gujarat. 12 secondary and 10 higher secondary schools were selected using stratified random sampling technique. Further 60 secondary and 50 higher secondary teachers were selected @ 5 teachers from each selected school. A total of 90 teachers out of 110 responded. It was found that a low degree of ICT awareness, use and need of secondary and higher secondary teachers. The variables related to ICT awareness of teachers were teaching experience, age and total salary. The variables related with the ICT use of teachers were total salary and computer training. The variables related with the ICT need of teachers were the degree program which they attended at the university level.

Singh (1985) studied attitudes of high school teachers towards creative learning and teaching. He used the same scale developed by Torrance and Phillips on a randomly selected sample of 100 high school teachers of Agra city, Uttar Pradesh. In this context, 72 percent, 10 percent and 18 percent of high school teachers were found to have unfavourable, favourable and indifferent attitudes respectively, towards creative learning and teaching. Their attitudes were also found not to be affected by age and teaching experience.

Mathur (1987) conducted a study on Attitudes of teachers towards creative learning and teaching. She found that teachers have favourable attitudes towards creative learning and unfavourable attitudes towards creative teaching. Gender did not tend to affect the attitudes of teachers of pre-higher secondary, higher secondary and post-higher secondary stages towards creative learning and teaching. Teaching experience tended to affect the attitudes of teachers of the higher secondary stage towards creative teaching. By and large, educational stages tended to affect the attitudes of teachers of various groups formed on the basis of age, sex, teaching experience and academic disciplines towards creative learning and teaching.

For instance, foreign studies show that Beethenglau and Chiahuasim (2008) conducted a study on exploring the extent of ICT adoption among secondary school teachers in Malaysia. They investigated teachers ICT use in schools, their perceived competency, perception of ICTs and their training and support needs. From the study it was found that most of them are positive with the use of ICT in school, and they appreciate the use of ICT in enhancing teaching and learning. The teachers have positive attitude towards further integration of technology into classroom instruction.

Joseph (2000) designed a qualitative study of the beliefs and practices of a group of effective middle school teachers with respect to constructive learning and teaching environments. The results clearly showed an evidence of correlation between the beliefs and practices found in constructivism and 88 how effective are the middle level learning and teaching environments. Constructivists more conscious of the role of both student and the teacher are in affecting cognitive development of students.

There was a concentrated effort by Chaille and Britain (1991); Tobin and Dawson (1992); Tolman and Hardy (1995); and Louise, S.E. (2000) in studying the role of a teacher in constructivist approach. It was pointed out that in a constructivist classroom; the teacher is no longer the transmitter of knowledge but the facilitator of learning (Tobin and Dawson, 1992). The facilitator of learning needs to keep in mind that instruction will vary depending
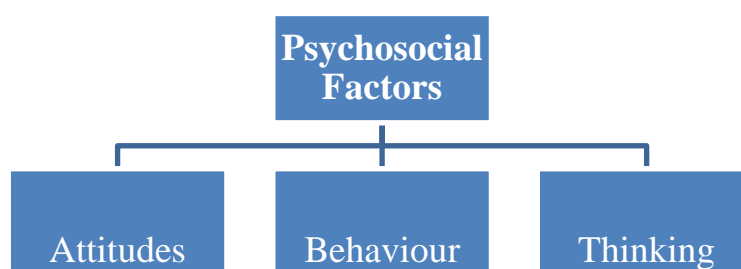
on the learners' prior knowledge (Tobin and Dawson, 1992), current interest, and level of involvement (Chaille and Britain, 1991), acquiring, understanding, using and reflecting on knowledge (Tolman and Hardy, 1995).

Role of Information & Communication Technology (ICT) and Media Psychology

One and all knows that media does or doesn't (pro and cons) have a profound influence on our lives and behaviour. Psychology is a key to understanding the implications of ICT. There are probably few areas of modern social science that are as fiercely and rancorously debated as is media psychology. Media psychology is the branch of psychology that focuses on the relationships between human behaviour and the media. This branch is a relatively new field of study because of advancement in ICT. It uses various methods of critical analysis and investigation to develop a working model of a user's perception on media experience. These methods are used for society as a whole and on an individual basis. Media psychologists are able to perform activities such as consulting, design, and production in various media like television, video games, films, news broadcasting and so on and so forth.

On the other hand, media influences/effects the thinking power and behaviour of the persons in the society. Mass media plays a crucial role for forming and reflecting the public opinion, for connecting one individual to other individuals and for reproducing the self-image of the society. The media has the strong social and cultural impact upon the society. Bandura theory also plays little attention for the short term and long term effects of media on the society. In fact, media is a double-edged sword and hence there are positive effects of media as well as negative influences of media in our society.

In this context, the psychology of media communications is an emerging field of study. All media influence human behavior and socio-culture. Cognitive psychology combines the logistic views of the media psychology. Educational psychology pioneer continues to argue the "e" i.e. e-Learning that means more than electronic and embraces exciting, enthusiastic, energetic and exceptional a variety of additional cognitive and sensory implications relating to behavior.

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Four important factors that have an influence on a person -
- Knowledge
- Skills
- Attitude
- Social behaviour

In fact, these four (i.e. knowledge, skills, attitude and social behaviour) are major impact on our human behaviour and socio-culture.

Impact of ICT in Education
- India has made significant progress in ICT adoption in education, with various initiatives like Digital India, National Digital Literacy Mission (NDLS) and SWAYAM (Study Webs of Active-Learning for Young Aspiring Minds).
- However, there's still a gap in effectively integrating ICT into teaching practices, especially in rural and underprivileged areas.
- Digital divide and unequal access to ICT resources.

Attitude towards Creative Teaching
- Indian educators are increasingly recognizing the importance of creative teaching methods such as project-based learning, flipped classrooms and gamification.
- There's a growing interest in using ICT tools like educational software, multimedia resources, and online platforms to support creative teaching.
- Barriers to adopting creative teaching methods.

ICT Integration in Creative Teaching
- Potential of ICT to enhance creative teaching.
- Examples of ICT tools and resources for creative teaching (e.g. educational software, multimedia resources, online platforms).
- Case studies of successful ICT integration in creative teaching in India.

Challenges and Opportunities
- Limited digital literacy among teachers, especially in rural areas.
- Inadequate infrastructure, including internet connectivity and hardware.
- Resistance to change from traditional teaching methods.
- Need for more training and support for teachers to effectively integrate ICT into their teaching practices.
- Government initiatives and programs to enhance ICT adoption in education.
- Growing availability of digital resources and online platforms.
- Increasing awareness of the importance of creative teaching methods.
- Potential for collaboration and knowledge-sharing among educators.
- Challenges: Digital literacy, infrastructure, resistance to change.
- Opportunities: Government initiatives, growing digital resources, increasing awareness of creative teaching.

Way Forward
- Provide comprehensive training and support for teachers to develop their ICT skills and creative teaching practices.
- Improve infrastructure and internet connectivity in rural and underprivileged areas.
- Encourage collaboration and knowledge-sharing among educators.
- Develop and promote high-quality digital resources and online platforms.

Key roles of ICT in education
1. Access to resources: ICT provides access to a vast array of educational resources, including e-books, online courses, and educational websites.
2. Accessibility: ICT provides opportunities for students with disabilities, remote or rural students, and those with conflicting schedules.

3. Data analysis: ICT helps teachers track student progress, identify areas of improvement, and make data-driven decisions.
4. Developing digital literacy and citizenship: ICT integrates technology skills into the curriculum, preparing students for the digital age, online safety, etiquette and responsibility.
5. Enhanced collaboration with teacher-student interaction: ICT facilitates collaboration among students, teachers, and peers, promoting teamwork and communication skills, regular feedback, mentoring and guidance. Towards ICT tools like digital art, music, and writing software empower students to express themselves creatively.
6. Enhanced engagement and real-world connections: ICT makes learning more interactive, immersive, and engaging, leading to improved student motivation and participation along with ICT helps connect theoretical concepts to real-world applications and scenarios.
7. Enhances visualization: ICT tools like videos, images, and simulations help students visualize complex concepts.
8. Fosters innovation: ICT enables teachers to design innovative lessons, activities, and assessments.
9. Improved assessment: ICT facilitates innovative assessment methods, such as online quizzes and gamification.
10. Personalized learning and facilitates formative assessments: ICT enables tailored learning experiences, catering to individual students' needs, abilities, and learning style, understanding, and creativity in real-time.
11. Professional development: ICT enables teachers to update their skills, share resources, and participate in online communities.
12. Promotes collaboration: ICT facilitates peer collaboration, feedback, and sharing of ideas.
13. Supports differentiated instruction and flipped classrooms: ICT allows teachers to cater to diverse learning styles, abilities, needs, traditional teaching methods, delivering instruction at home and activities in class.
14. Virtual classrooms: ICT enables remote learning, connecting students and teachers across geographical distances.

CONCLUSION

The role of ICT in education is multifaceted and transformative. In recent times we are enhancing ICT awareness and promoting innovative teaching in India. This shape provides a complete framework for exploring ICT awareness and mindset toward innovative teaching. By using integrating ICT into training, we can create a greater inclusive, powerful, and attractive mastering environment that prepares students for achievement in the digital age. Through leveraging ICT, teachers can create engaging, scholar-targeted, and innovative mastering environments that foster imagination, vital questioning, and hassle-fixing abilities.

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Conflict of Interest
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