



Teachers' Attitude towards Effective Use of Creative Teaching Pedagogies: Challenges and Opportunities with special reference to Higher Education

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Abstract:

Creative teaching pedagogies have gained significant attention in recent years as educators recognize the importance of engaging and involving students in the learning process. In modern education scenario, the more focus is given on student-centric methods. Teachers play a vital role in implementing creative teaching methods to foster critical thinking, problem-solving skills of the students and overall academic achievement of the institutes. Understanding teachers' attitudes towards the effective use of creative teaching pedagogies is crucial for enhancing educational practices and promoting positive student outcomes. This research project aims to explore significant factors influencing teachers' attitudes towards creative teaching pedagogies and also to bring out the challenges faced by the teachers particularly in higher education and subsequently pen down the opportunities for furthering the ease of adapting to creative teaching.

Keywords: creative teaching pedagogies, teachers' attitude, higher education

1. Introduction

Creativity is derived from the Latin word *creare* meaning 'to make' or 'to produce' and is used in Latin to denote the original 'divine' creation of the world. It embodied presenting something novel and original, thus, closely related to originality, novelty, inspiration, genius, and individuality as put forth by Preminger and Brogan, 1993 (Zulkifli H, Tamuri AH and Azman NA, 2022). Creativity can also be defined as "the interaction among aptitude, process, and environment by which an individual or group produces a perceptible product that is both novel and useful as defined within a social context" (Plucker et al., 2004) as cited by (Zulkifli H, Tamuri AH and Azman NA, 2022). In addition, creativity is "the development of ideas about products, practices, services or procedures that are (a) novel or original and (b) potentially useful" Amabile, 1996; Zhou and Shalley, 2003; Shalley et al., 2004, as cited by (Zulkifli H, Tamuri AH and Azman NA, 2022). The National Advisory Committee on Creative Cultural Education (1999) proposed that creative teaching warrants distinction. Creative teaching should be distinguished from teaching for creativity. In the report by the National Advisory Committee on Creative and Cultural Education NACCCE (1999) 'Creativity is the application of knowledge and skills to produce a new method to achieve a certain outcome. Thus, the essential four qualities to be fostered in students are:

- ability to identify new problems, and not depend on others,

- ability to transfer knowledge that they obtained from a certain context to another in solving problems,
- belief that learning is a multilevel process, where repetition will produce success,
- capacity to focus in achieving an outcome.’ (Seltzer & Bentley, 1999)

These qualities can be effectively nurtured through their educational experience in which creative teaching can play a significant role as mentioned earlier. Creative teaching is an art (Craft, 2001) and therefore teachers need to develop a range of skills themselves which they can adapt and apply to different situations.

Creative teaching pedagogies thus encompass a range of instructional approaches that encourage active student participation, exploration, and innovation. These methods often involve hands-on activities, collaborative learning, project-based assignments, and the integration of technology to foster creativity, critical thinking, and problem-solving skills.

2. Objectives of the study

Following are the research objectives of the study

- To explore the levels of awareness among teachers about various teaching pedagogies
- To determine the existing attitudes and comfort levels of teachers towards creative teaching pedagogies
- To investigate the potential benefits and opportunities associated with the effective use of creative teaching pedagogies
- To identify the barriers and challenges faced by teachers in implementing creative teaching pedagogies
- To evaluate the existing support systems available to teachers for incorporating creative teaching pedagogies
- To recommend guidelines for supporting teachers in utilizing creative teaching pedagogies more effectively

3. Literature Review

Creative teaching pedagogies have emerged as powerful instructional approaches that foster active engagement, critical thinking, and innovation among students. To begin with one has to be aware of the various diverse research conducted on two different concepts i.e. “creativity” and “creative teaching”. Though one cannot remove creativity from creative teaching, the literature here is majorly referred to that of the later which is the main theme of research work intended here. While recognizing the significance of creative teaching in nurturing creativity, it is worth noting that the studies related to researching creative teaching are relatively new and limited. Nevertheless, an attempt has been made here to undertake an overview of the existing research on creative teaching pedagogies, exploring the theoretical underpinnings, benefits, challenges, and strategies for effective implementation and allied aspects.

The early-stage research on creativity was significantly shaped by Torrance’s (1969) ideas particularly in adoption of the psychometric approach. This process includes the creation of original ideas, diversity of views, out of habits, the combination of new ideas and looking at relationships between ideas. In the context of education, creativity is necessary for teaching and learning. Teachers need to be creative in teaching to get and retain students' attention, and for them to remain motivated in the classroom. (Zulkifli H, Tamuri AH and Azman NA, 2022). Creative teaching can also make learning invigorating, meaningful, and realistic. It is defined as “the development and use of novel, original, or inventive teaching methods” (Educational Resources Information Center (ERIC), 2017). Many studies indicate that Creative teaching has been linked to effective teaching (Sawyer, 2011; Reilly et al, 2011) that enhances learning (Rinkevich, 2011, Nickerson, 2010; Horng et al, 2005). Creative teaching is an important component of nurturing creativity (Grainger, Barnes & Scoffham, 2004; Beghetto & Kaufman, 2010; Cheng et al, 2010; Sternberg, 2015). Creative teaching is defined as educational exchanges facilitated by the teacher that are “unique, customized and meaningful” (Rinkevich, 2011), and that are exciting, engaging and innovative (Craft, 2011). Creative teaching is complex, involving a broad range of skills, experience, and

perspectives (Ambrose, 2005). Sawyer (2010) suggests that this act of creative teaching emerges as a form of “disciplined improvisation,” intimately tied to teacher experience. Thus it can be stated that Creative teaching involves a dynamic process where teachers create innovative curricula and adapt their teaching strategies to meet the specific needs of their students. According to Palaniappan (2009) and Jasni et al. (2020), creative teaching is closely related to a variety of techniques and methods that incorporate elements of creativity and involve effective interactions between teachers and students (Tan and Goh, 2007; Palaniappan, 2009). Sawyer (2011), on the other hand, assessed creative teaching based on the teachers' ability to use their imagination and employ engaging methods, and possess the value of originality and judgment.

Several physical attributes of the learning environment have been linked to learning outcomes and the facilitation of creative production. In their literature review of learning environments and creativity, Warner & Myers (2009) compiled the known variables that influence creative behavior, including; technology, color, lighting, furniture, decoration, elements that engage senses, resources, class size, and physical configurations within and between physical rooms. Jankowska & Atlay (2008) suggest that aesthetic, visual, and flexible attributes of spaces enhance learning, and support the generation of creative spaces. Other research that has contributed to identifying these and other environmental qualities that foster creativity include those by Kristensen (2004), Cropley & Cropley (2008), and Jindal-Snape et al. (2013). At the same time gaining insight into the factors that encourage teachers' creative expression is crucial for creating an optimal educational environment. By understanding these factors, educators and administrators can make informed decisions and implement strategies that promote creativity and enhance the overall quality of education. It is important to understand the relationship between the creative teacher, creative praxis, and the teaching environment highlighting the fact that while creative teachers have the aptitude to be creatively expressive in practice, the actuality of teaching in a creative way is informed and sometimes thwarted by the environment (Lawrence, 2016). Previous research on creative teaching found that factors that drive students' creativity in the classroom were positive relationships between teachers and students, modeling creative behaviors, ensuring a balance of freedom and structure, understanding students' needs and learning styles, creating opportunities for collaboration, and effectively using resources (Davies et al., 2014) as cited by (Zulkifli H, Tamuri AH and Azman NA, 2022). Another study conducted by Pazin et al. (2022) claimed that there were three groups of factors that influenced teachers' creative teaching, namely demographic factors, individual factors, and organizational factors (Zulkifli H, Tamuri AH and Azman NA, 2022).

4. Research Design

The present study adopts a semi-structured questionnaire survey carried out through google form with an attempt to explore the factors affecting teachers' attitudes towards creative teaching pedagogies and bring out a relationship between them. The target population of the study was 104 participants across the India undergoing an online faculty development program on “Leveraging Teaching-learning Process: A Special Focus on NEP and Accreditation”. The sample population comprised of 66 participants who have responded to the google form. Psychometric analysis has been attempted using Likert scale technique to gather the teachers' attitudes and opinions about the same. Aspects related to geodemographic data, occupational background, ease of comfort in digital transformation etc. have been considered. Certain focused open-ended inquiries about the teachers' experiences of implementing creative teaching methods and their impact on students' performance, challenges faced and their suggestions have been considered.

5. Analysis and Interpretation:

5.1 Geodemographic Aspects:

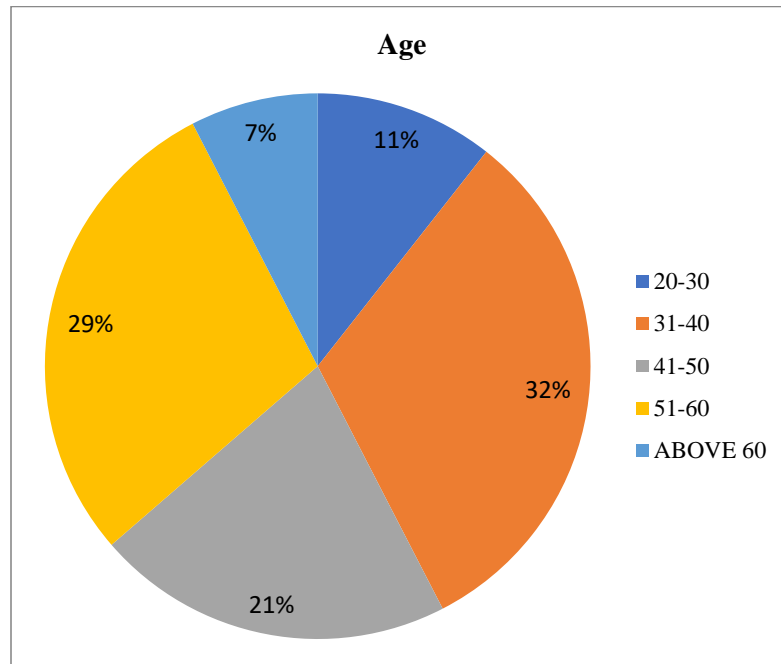


Figure 1: Percentage of respondents' age group

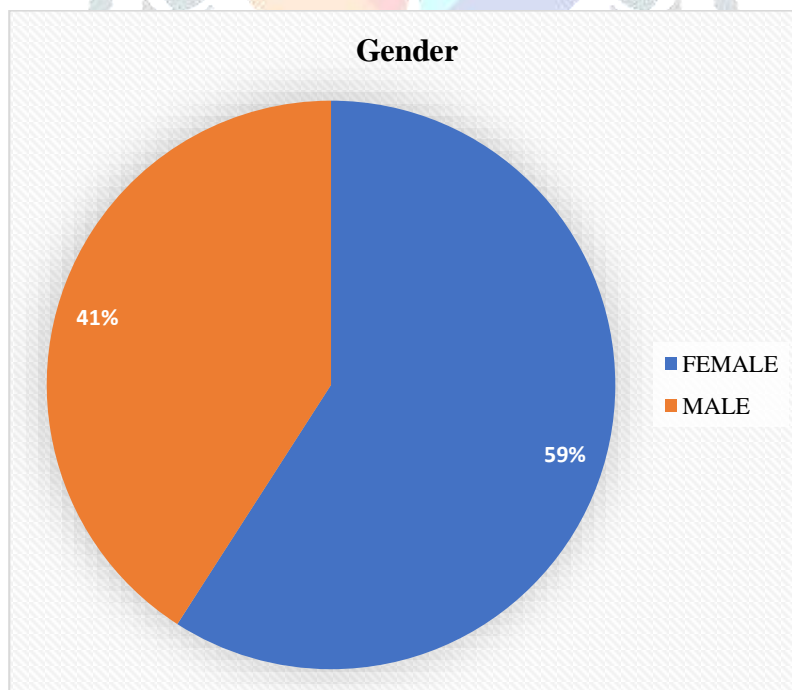


Figure 2: Percentage of respondents' gender

According to figure 1 and figure 2, following points are notable:

- 59.1% were female teachers while 40.9% were male teachers
- More than 50% respondent teachers are in age group of 31-50, while of 80% of respondent teachers fall in age group 31-60.

5.2 Academic and Educational Aspects:

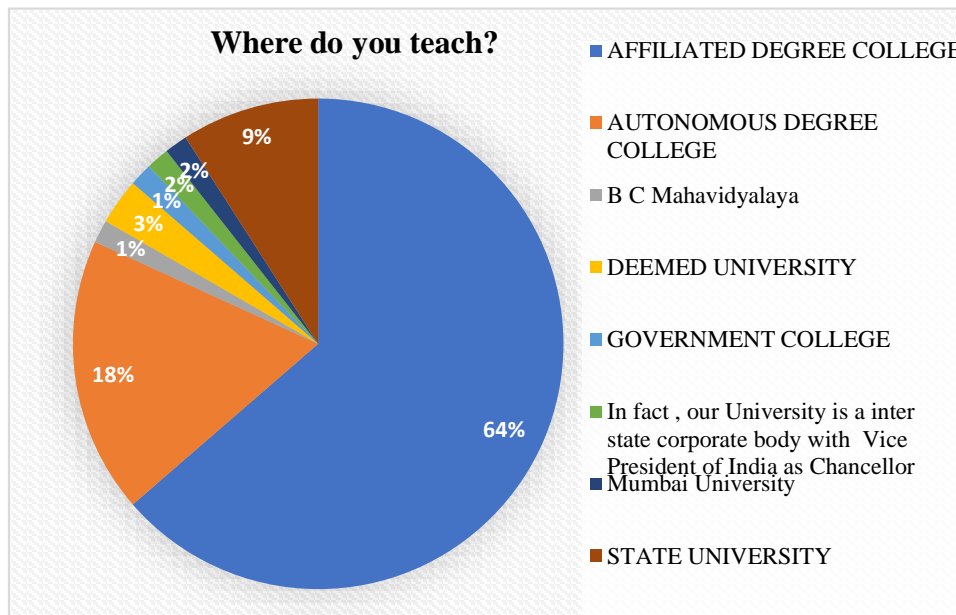


Figure 3: Percentage of respondent’s affiliation to colleges or universities

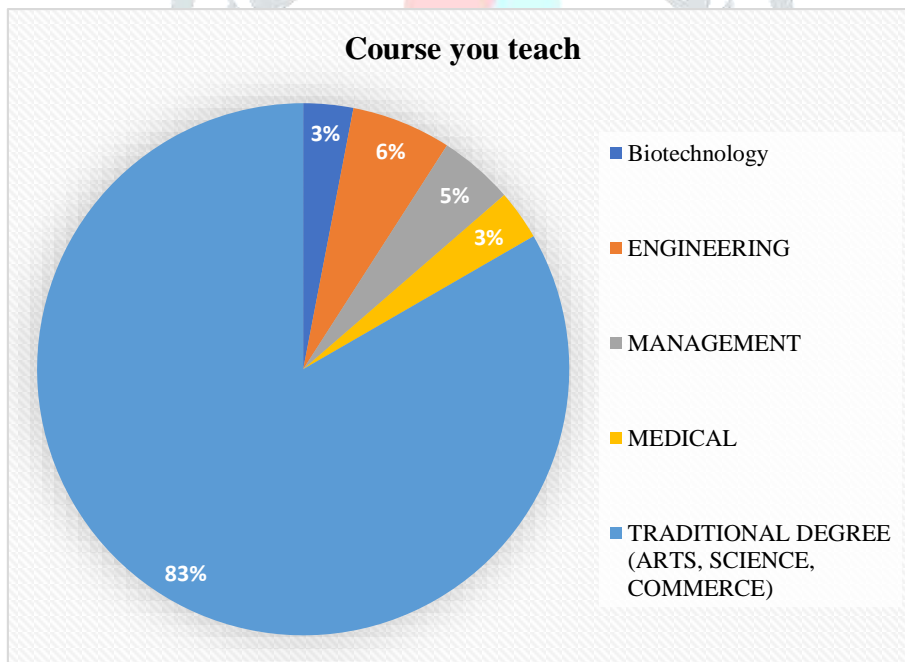


Figure 4: Percentage of respondent’s teaching various courses

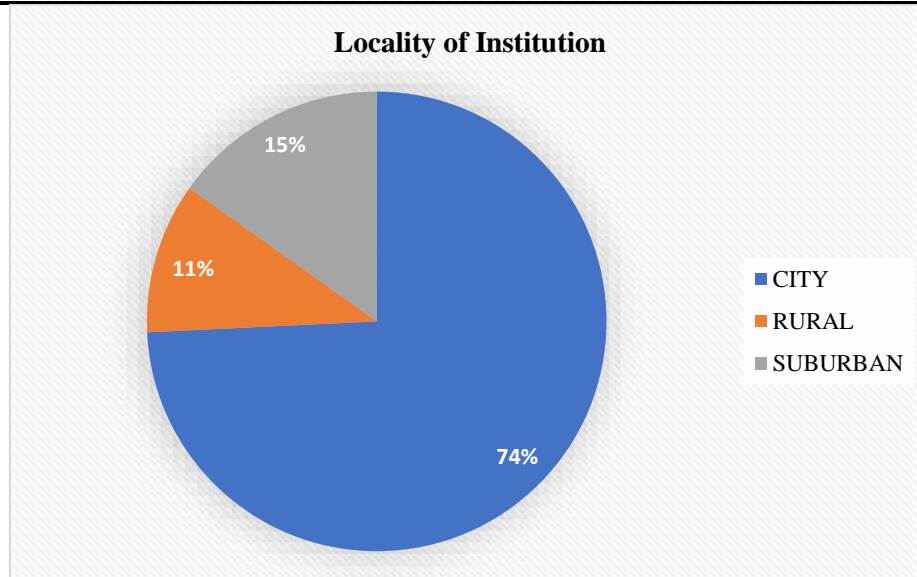


Figure 5: Percentage of locality of institutions

According to figure 3, figure 4 and figure 5, the academic and educational background of the respondent teachers reveals following details:

- More than 60% of them teach in affiliated Degree Colleges while next major group consisting of about 18.2% teach in Autonomous Degree College; thus suggesting these are the major providers of higher education in the state.
- More than 80% of the teacher respondents cater to students of traditional degree college courses.
- More than 70% of the workplace is located in urban city area.

5.3 Teachers' attitude towards Creative Teaching:

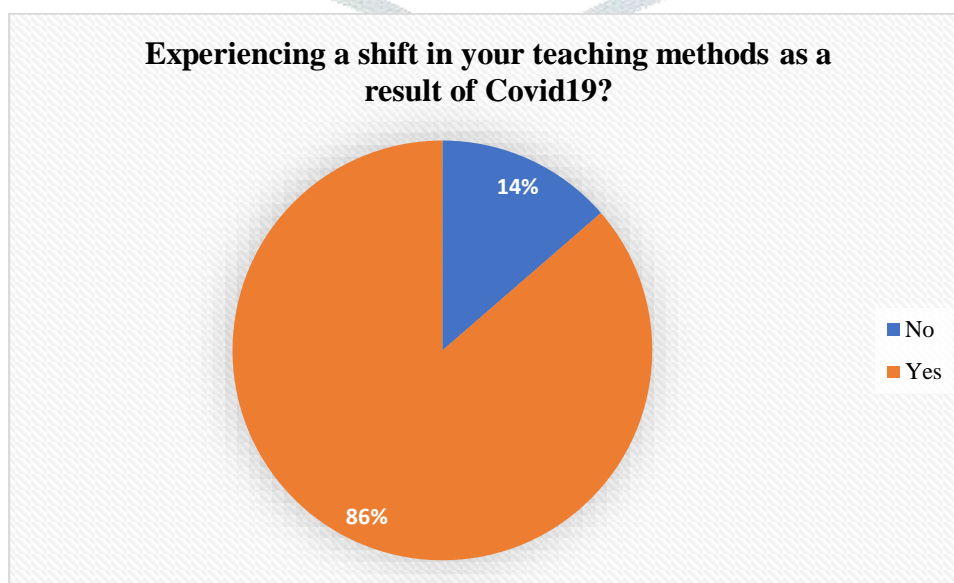


Figure 6: Percentage of shift in teaching methods after COVID19

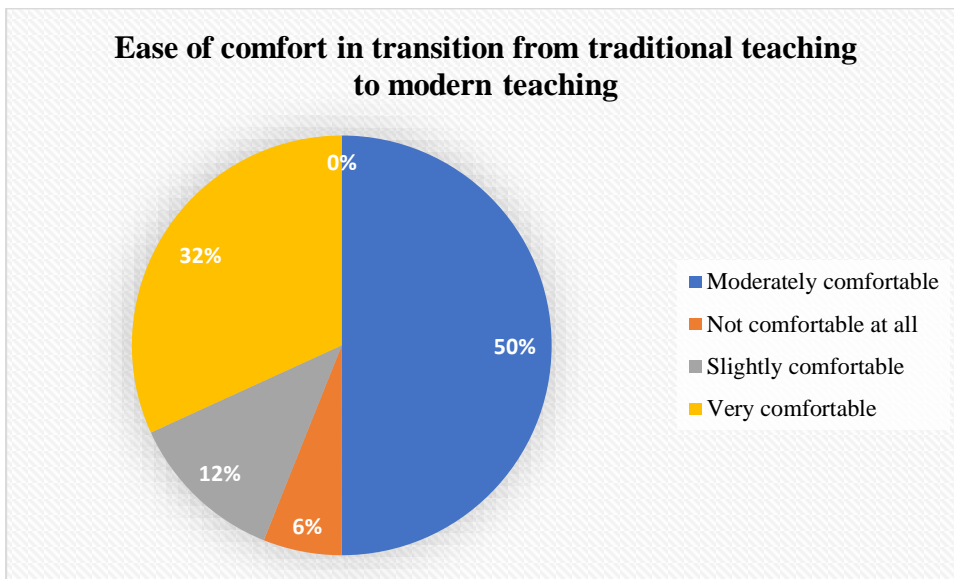


Figure 7: Percentage ease of comfort in transition from traditional teaching to modern teaching

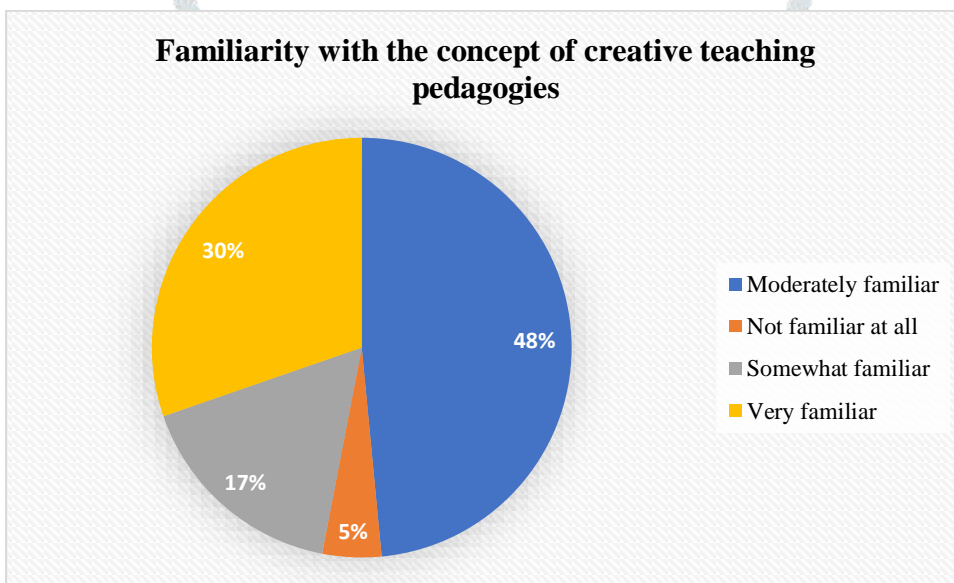


Figure 8: Percentage Familiarity with the concept of creative teaching pedagogies

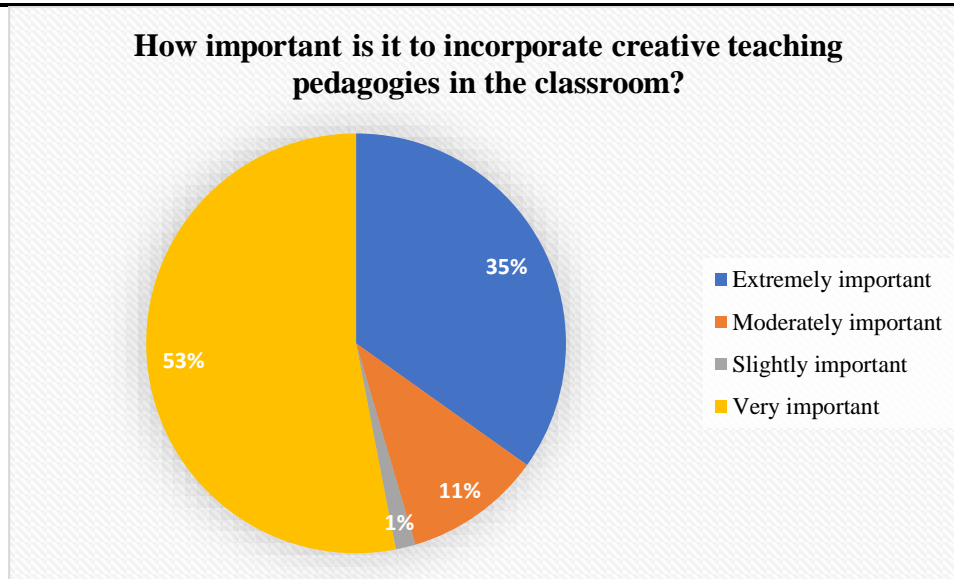


Figure 9: Percentage importance to incorporate creative teaching pedagogies in the classroom

The figure 6 to figure 9 provides an insight into the attitudes and opinions of teachers regarding creative teaching pedagogies, based on psychometric analysis. Questions pertaining to awareness levels regarding creative teaching have been considered.

Additionally, specific open-ended inquiries were incorporated to explore teachers' experiences with implementing creative teaching methods, their perceived impact on students' performance, challenges encountered, and any suggestions they may have provided. Thus the significant aspects brought out by the present study are:

- More than 85% experienced a shift in teaching methods as a result of the COVID-19 pandemic
- The ease of comfort in transitioning to online or remote teaching was experienced by about 80%
- Only about 30% of teachers are very familiar to the concept of creative teaching
- Most of the teachers have gained familiarity about the concept through their participation in academic enrichment programmes with FDP (60.6%) topping the list of courses followed by FIP / Orientation Programme (43.9%)
- Use of google classroom to disseminate reading and reference material was preferred by about 34% of teachers.
- Innovative methods such as online quiz, games were more popular (36.4%) than creating of digital content such as you tube and other video conferencing tools (13.6%).
- More than 87% of teachers feel that it is important in present times to incorporate creative teaching pedagogies in the classroom
- About 64% believe that NEP supports the integration of creative teaching pedagogies in the classroom teaching

5.4 Preferences for Creative Teaching Pedagogies:

The open-ended inquiries were incorporated to explore teachers' preferences while implementing creative teaching methods.

- Project-Based Learning (students work on real world issues) – 60.6%
- Collaborative Learning (students work together in groups or teams to accomplish a shared goal) – 50%
- Technology-Enhanced Learning (incorporating educational technologies, digital tools, or online resources) – 48.5%
- Experiential Learning (providing hands-on, real-world experiences) – 39.4%
- Problem-Based Learning (students solve authentic, complex problems by applying their knowledge and skills) – 37.9%
- Inquiry-Based Learning (students explore topics by conducting research) – 34.8%

- Gamification (use of educational games, simulations, or game-based activities) – 19.7%
- Flipped Classroom (self-directed learning outside the classroom through pre-recorded lectures or materials, etc..) – 18.2%
- Differentiated Instruction (personalized learning experiences to meet diverse learning needs and preferences) – 15.2%
- Arts Integration (infusing arts such as music, visual arts, drama, or dance into academic subjects) -13.6%
- Google Classroom for sharing of lecture material, revision, and assignment submissions – 1.5%
- Effective use of ethnographic inputs – 1.5%

5.5 Teachers' Experiences while implementing Creative Teaching:

To gain an understanding of the Teachers' experiences while implementing creative teaching pedagogies, the open ended questions on attributes related to confidence levels, student engagement, adequate support and training, time-constraint, efficacy in addressing diverse learning needs were considered.

- The majority (more than 65%) responded positively towards confidence levels and student engagement while implementing creative teaching methods,
- More than 60% expressed the need to receive adequate support and training to incorporate creative teaching pedagogies.
- There is a general consensus on the fact that creative teaching pedagogies are time-consuming and challenging to implement given the diverse needs of the subject and the students.
- While moving ahead to take on these challenges, teachers have utmost faith that NEP adequately addresses the need for creative teaching pedagogies and supports the development of creative and critical thinking skills among students, while providing a conducive environment for teachers to develop innovative teaching approaches.

5.6 Impacts generated through use of Creative Teaching Methods:

The open ended survey results indicate the impacts generated through the use of creative teaching methods. Overall, the responses were mostly positive, highlighting the following outcomes:

- Ease of teaching and deeper understanding of concepts by students.
- Improved learning outcomes and effective teaching.
- Enhanced understanding of topics, team spirit fostered through group work, and analytical thinking promoted through case study approaches.
- Availability of materials throughout the semester and increased attention span and retention of information.
- Increased interest and active participation of students.
- Improved learning ability and cognitive skills.
- Increased student engagement, attendance, and interest in the subject.
- Development of critical thinking, analytical skills, cognitive development, and self- confidence.
- Better understanding and conceptual clarity among students.
- Skill development for industry readiness.
- Motivation and enthusiasm among students.
- Improved communication skills and teamwork.
- Increased interest, awareness, and motivation for learning.
- Easier comprehension of topics and better conceptual clarity.
- Progress and development observed within students.
- Increased student participation, engagement, and interest.
- Development of creativity and higher cognition through the use of videos or art forms.
- Potential for further exploration and improvement.

Following are some of the interesting responses related to psychometric analysis conducted to understand the nature of impacts generated on students:

- More than 50% strongly agree that Creative teaching has enhanced student engagement in the classroom.
- More than 55% agree that Creative teaching has significantly improved students' thinking skills
- More than 61% strongly agree that creative teaching strategies positively influenced students' motivation to learn
- More than 55 % strongly agree and more than 86% agree that Creative teaching has contributed to improved problem-solving abilities among students
- More than 84 % have agreed that there is an increase in students' collaboration and teamwork skills as a result of implementing creative teaching methods
- About 88% agree that Creative teaching has addressed the diverse learning needs of students
- About 90% agree that Creative teaching has positively impacted students' retention and understanding of course content
- About 88% agree Creative teaching strategies enhanced students' overall enjoyment of the learning process
- About 90% agree that Creative teaching had helped in fostering students' creativity and innovation

Overall 75% teachers have expressed their satisfaction from moderate to high levels with the impact of creative teaching on students' learning outcomes. While the majority of responses expressed positive impacts, some mentioned little or moderate impact, while others highlighted specific challenges such as technical issues in online teaching. Overall, the results suggest that creative teaching methods have the potential to enhance student learning, engagement, and understanding, although further exploration and refinement may be needed in some cases.

5.7 Challenges faced in implementing online and creative teaching pedagogies:

Based on open ended descriptive analytical questions, the challenges and barriers encountered in implementing creative teaching pedagogies, as reported by the respondents, are thus stated to include:

- Infrastructure limitations and the need for more training workshops.
- Lack of student interest and a tendency towards online plagiarism.
- Time-consuming nature of preparations and the requirement for props.
- Noisy work atmosphere and network problems affecting student engagement.
- Poor quality of internet and limited access to technology like online projectors.
- Large number of students and insufficient resources or time for teaching every concept creatively.
- Lack of student openness, low attendance, and challenges in remote areas.
- Difficulty in engaging students, lack of creativity among teachers, and routine curricula.
- Lack of assessment methods
- Communication issues and difficulty in keeping students attentive.
- Difficulty in shifting from classroom to online teaching and lack of ICT availability.
- Lack of support from institutions and delayed license renewal.
- Low attendance and students' casual approach.
- Motivating students, sustaining their interest, and encouraging participation.
- Balancing work-time
- Limited student responsiveness and varying student attitudes towards new learning methods.

These challenges highlight the importance of addressing infrastructure and technical issues, promoting student engagement and motivation, providing training and support for teachers, and finding effective ways to assess and sustain student interest in creative teaching approaches.

6. Measures for enhancing the teachers experience of implementing creative teaching:

Based on the opinions expressed by the respondents, the present research suggests following measures that would be helpful in further integrating creative teaching pedagogies and enhancing the teaching learning experience

- Access to full features of Learning Management Systems (LMS) and training workshops.
- Infrastructure support at the workplace, including uninterrupted internet facilities and assistance from non-teaching staff.
- Utilizing different platforms and modules for effective teaching.
- Easy-to-use audio-video recording systems and applications.
- Simulation as an additional resource for clinical-based teaching.
- Awareness and ease of access to online resources.
- Small-sized student batches for personalized attention.
- Integration of digital classrooms.
- Technological support and resources, including cameras, mobile devices, and PCs, laptops, projectors, speakers, microphones.
- Motivation and appreciation for teachers.
- Experiential learning opportunities.
- Inclusion of creative teaching components in faculty development programs and orientation courses.
- Provision of smart boards with audio-visual screens.
- IT support for creating videos and public address systems in classrooms.
- Training for digital content creation through workshops, seminars, FDPs.

These suggested resources and support emphasize the importance of integrating technology, providing training opportunities, improving infrastructure, and utilizing various teaching tools to enhance creative teaching pedagogies in the classroom.

7. Conclusion

In conclusion, creative teaching pedagogies have emerged as a valuable approach in education, providing teachers with innovative methods to engage students and enhance their learning experiences. Through the incorporation of creative teaching strategies, teachers can foster an environment that promotes critical thinking, problem-solving, and collaboration among students. The results of various studies have highlighted the positive impacts of creative teaching pedagogies, such as deeper conceptual understanding, improved student engagement, and the development of essential skills for the 21st century. The implementation of creative teaching pedagogies also presents challenges, including the need for adequate support, training, and resources. Teachers may face time constraints and find it challenging to strike a balance between structure and freedom in their classrooms. Nonetheless, with the right support and professional development opportunities, teachers can overcome these challenges and fully leverage the potential of creative teaching pedagogies. It is crucial for educational institutions and policymakers to recognize the importance of creative teaching pedagogies and provide the necessary support to facilitate their integration into the curriculum. This includes offering training programs, access to resources, and creating an enabling environment that encourages experimentation and innovation in teaching practices. By embracing creative teaching pedagogies, educators can inspire students, foster their curiosity, and equip them with the skills needed to thrive in an ever-changing world. The ongoing exploration and refinement of creative teaching approaches hold great promise for shaping the future of education and empowering students to become lifelong learners and creative thinkers.

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