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Teaching-Learning Strategies for Fostering Creative and Innovative Skills in Community School Students

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Abstract

This study examines the existing situations and practices of the strategies to promote creative and innovative skills in community schools. It also discusses the techniques to foster innovative teaching-learning activities based on students', teachers', and administrators' understanding and experiences. Then, it explores the roles of the concerned authorities to support and empower the teachers to plan student-engaged activities and the students to perform their roles and grow with creative and innovative skills. A qualitative design was followed to complete this study, and the information for the study was collected from an open-ended questionnaire and in-depth interviews with the teachers, administrators, and students. The meaning was generated from the themes developed from the codes by categorizing and grouping the information gathered from the participants. The study found that the administration and management have a crucial role in establishing creative and innovative teaching-learning environments and facilitating the teachers to launch experiential teaching-learning activities. Similarly, when teachers guide the students to plan and conduct different curricular and co-curricular activities, they employ their best efforts and become more creative and innovative. It concludes that the activities planned and organized by the students under the guidance of the teachers and in support of the concerned authority make students more creative and innovative.

Keywords: hands-on experiences, critical thinking, innovative skills, learner-engaged activities

Introduction

Teaching learning strategies determine students' learning experiences: They learn in the way they are treated, brought up, and schooled. Promoting personalized, student-centered, and skill-based instruction is necessary for improving students' creative and innovative skills. For this, teachers have a significant role in delivering learning experiences that nurture students with creative processes and innovative products. This study provides hands-on experiences for novice teachers to make their teaching creative and innovative, cultivating students with creativity and innovation (Sinay, 2018). Likewise, the administration has a crucial role in managing and

facilitating teachers to organize different events and programs to nurture students with creativity and innovation. As a result, the students grow with the skills as they are encouraged and led to grow ahead.

The concerned authorities determine what skills and competencies students should develop through educational activities. Similarly, assessment has a significant role in focusing on the areas to be enhanced. Schools have yearly curricular, co-curricular, and extracurricular activities to nurture children with creative and innovative skills, the skills to generate new and unique ideas and solutions. Creativity and innovative skills empower students and teachers with academic and transversal competencies. Academic competencies refer to the knowledge and skills acquired through teaching-learning. In other words, academic competency is the ability to understand, interpret, and analyze written information. In contrast, transversal competencies are versatile skills like critical thinking and communication that apply across disciplines and real-life contexts. Soft skills also empower people to communicate, work, share, cooperate, and solve problems effectively (Lion et al., 2022). In the context of educational activities, teachers and students need to develop creativity and innovation skills. However, they are directly or indirectly compelled to memorize and prepare for high-stakes tests (Amrein & Berliner, 2002). This pressure seems to have hindered the growth of students' creativity and innovation skills. Despite the efforts to make teaching-learning creative and innovative-oriented, it is still mechanical, tedious, and stressful.

The paper examines the existing practices and strategies to promote creative and innovative skills in community schools and explores the strategies to foster innovative teaching-learning activities. For this, it interprets the meaning-making of students, teachers, and administrators in terms of creative and innovative teaching-learning processes. The study first explores teachers' experiences and understanding of creative and innovative teaching. Then, it investigates students' experiences and the meaning-making of creativity and innovation skills. Finally, it examines administrators' perceptions and their support for teachers in planning and organizing events and programs to nurture students with these skills.

Review of Theoretical Literature

Creative and imaginative abilities are prioritized in educational settings. With the evolution of the global economy towards a knowledge-based framework, there is a growing demand for individuals possessing strong analytical, problem-solving, and creative skills. Educational

institutions play a crucial role in fostering these skills from an early age. Community schools have the potential to enhance students' creativity and innovation, even in the face of diverse demographics and limited resources. To enhance these skills, elevate academic achievement, increase engagement, and foster career development, contemporary global education standards and curricula emphasize these competencies. Problem-based learning, collaborative projects, arts integration, and technology-enhanced interactive and immersive experiences contribute to the cultivation of innovative learning. These strategies prioritize critical and creative thinking rather than rote memorization.

Globalization is one of the ground realities that impact instructional activities in the present situation. Modernization and globalization influence theories in every learning area (Pulsay, 2024). Though the innovative and creative skills of the students have been practiced by the students, teachers, and community members, they also have been influenced by modernization and global change in the learning process. Through these broader concepts, learning is always determined and impacted by the learner's achievement beyond memorization. Similarly, the activeness of the constructivist teacher makes it easy to learn innovative and creative skills. So, the constructivist idea is also another theoretical framework of the study.

Critical Thinking, Creativity, and Innovation

Critical thinking is an active process of analyzing, evaluating, and synthesizing information to make rational judgments. It involves questioning assumptions, identifying biases, and seeing multiple perspectives to reach well-informed conclusions. Any reasoning without evidence is untrustworthy (Budnyk, 2023). Critical thinkers are always open-minded, objective, and logical when assessing evidence and arguments. They always see things from multiple perspectives.

Creativity is generating new and intelligent ideas, solutions, or possibilities. It leads students to think outside the box, connect seemingly unrelated concepts, and develop new ideas. According to Andersons (1992), “Creativity is nothing more than seeing and acting on new relationships, thereby bringing them to life” (Hondzel, 2013, p. 23). In other words, it exists with a purpose inside originality or novelty. Critical thinking is the source of creativity. It can be “developed through discussion, dialogue, creative and group process” (Connolly, 2009, p. 47). For this, a learner-friendly, fearless, and justifiable environment, utterly free from domination, isolation, and discrimination, promotes meaningful discussion and dialogue in the classroom.

The innovation is a process of originating new ideas or products. In other words, it is an iterative process that develops, tests, refines, and implements creative ideas, leading to further creativity and improvement. It involves transforming creative ideas into tangible and valuable outcomes. According to constructivist teachers, teaching is strongly related to innovative classrooms (Hermans et al., 2008; Kaya, 2017). As creative thinking is the fuel for innovative ideas, creativity and innovation are interrelated. Creativity is an infinite source of innovation. Likewise, innovative thinking refers to the ability to think about something in a new way and differently from the traditional patterns. It helps one to generate new ideas and perform differently and smartly. The effect of globalization and modernization is also reflected in the instructional process of the constructivist teacher, which makes learning more creative and innovative.

Review of Empirical Literature

This part presents empirical studies on critical thinking, creativity, and innovation. According to Paudyal (2024), student-centered pedagogies enhance active participation, critical analysis, and the application of social science. This problem-based learning approach enables students to establish valuable connections, gain insights into industry challenges, and foster innovation. Innovative tasks enhance and elevate learning experiences. Programs emphasizing student engagement, such as cross-training in data-driven decision-making tools, provide graduates with strong skills from the start, supported by extensive training and networking opportunities both within and outside their field. The student-centered initiatives in undergraduate animal science programs are designed to equip students with the skills necessary to address real-world challenges as leaders in agriculture. Braa and Callero (2016) focus on using dialogue to increase students' active participation and develop critical social consciousness.

Hajalizadeh and Anari (2016) recommended active teaching to let pupils show off. The active teaching methods of brainstorming, problem-solving, pre-arranged patterns, and heuristics are popular. The brainstorming method separates response production and assessment. Students' creativity and critical thinking improve with brainstorming. A quasi-experimental approach with pretest, posttest, and control group assessments examines how brainstorming affects fifth-grade students' critical thinking and academic motivation. It found that participants' ideas and opinions should not be judged or evaluated during brainstorming to avoid time waste and performance disruptions.

Irugalbandara (2023) examined the impact of process theaters on creativity in secondary school students. The article explores various methods by which theater educators can enhance students' creativity. The study's findings provided important insights for creating targeted development programs for educators to improve their creative comprehension and application in the classroom. Innovative and engaging methods such as process drama can assist students in cultivating creative thinking, problem-solving skills, and adaptability, all of which are crucial for successfully navigating contemporary society.

Aisyah et al. (2024) developed unique learning models that use traditional games to improve early children's higher-order thinking. That study uses descriptive-qualitative methods. Interviews were conducted offline and in person. The study shows that intelligently designed, engaging play and learning activities associated with early childhood interests can improve children's higher-order cognitive skills. Engaging in scientific tasks helps kids think logically and analytically. Future research applications have several proposals. The research only includes conventional games to improve higher-order thinking. Innovative methods for improving early infancy thinking might be studied.

Babalola and Keku (2024) investigated the impact of ethno-STEM and PjBL (Project-Based Learning) on enhancing creativity among Nigerian secondary school students. The research emphasizes the significance of creativity in STEM education and the necessity for innovative teaching methods. The reliance on rote memorization in STEM education has faced criticism for not effectively equipping students to address real-world challenges creatively. The experimental group participated in Ethno-STEM integrated Project-Based Learning (PjBL), whereas the control group followed the standard curriculum in this four-month quasi-experimental study involving 84 pupils. Integrating Ethno-STEM in project-based learning enhances students' creativity, evidenced by the experimental group surpassing the control group in performance. Cultural knowledge and project-based learning in STEM education can improve student creativity and problem-solving skills.

Using demonstrative models and experiential learning activities, Pulsay (2024) enhanced scientific instruction at the Government Higher Secondary School, Trespone, Kargil. This study utilizes novel pedagogical approaches to stimulate student creativity and innovation. Activity-oriented presentations enhance attendance, academic performance, and extracurricular participation. This approach yielded three consecutive years of flawless biology exam results and

outstanding achievement in national competitions. Students triumphed in scientific problems via the use of creativity and critical thinking. Learner-centricity enhances communication and engagement while reducing instructor workload. Research indicates that scientific education requires distinct methodologies to foster creativity and innovation.

Privacy (2018) investigated the role of empathy in design thinking as utilized by instructors to enhance students' critical literacy from an early stage. The attitude domain of appraisal theory elucidates how educators facilitate students in articulating their emotions, assessing character behavior, and examining textual elements. A study on classroom discourse indicates that teachers' attitudes significantly contribute to students' critical thinking and knowledge development on narrative topics. The study's findings are anticipated to enhance the discourse analysis theory related to appraisal and illustrate story learning grounded in design thinking that fosters critical thinking among students.

Methodology

Existing teaching-learning practice in schools is blamed for ignoring students' creativity and innovative skills and making them more mechanical and paper-pencil test-oriented. In other words, it is teacher-centered, rote-learning-oriented, and exam-focused. A qualitative design followed by this research in which the information to be analyzed in the study was collected from a questionnaire as a survey tool, an in-depth interview, and an observation checklist. The participants for the study were selected from five community schools of Chandragiri Municipality, Kathmandu. One hundred teachers of such community schools were provided with a questionnaire as a survey tool. Out of them, only forty-three responded. Twelve out of the forty-three teachers were selected using simple random sampling, particularly the lottery system.

Similarly, fifteen students studying in grade eight were purposively selected and in-depth interviewed. In addition, five administrators from the schools were conveniently selected. The interview was both face-to-face and virtual. Ethical considerations were maintained through informed consent, voluntary participation, anonymity, and confidentiality (Afifin, 2018). Nobody of the participants was forced to participate in the study, and they were allowed to leave their participation whenever they wanted. Anonymity was maintained using the pseudonyms of participants. Confidentiality was maintained by assuring them of the confidential situation. The collected information was coded, categorized, and thematized (Attride-Stirling, 2001). Then, the meaning was generated by discussing the gathered data with theories and literature.

Result and Discussion

In this portion, the researcher has to make themes of the generated information, analyze and discuss them coherently, and prepare the subtopics according to the research questions.

Schools have scheduled events and programs in their yearly plan to foster them with creativity and innovation skills. These events and programs were expected to nurture students with holistic development. However, the outcome was unexpected due to some things that needed to be improved in organizing the programs and events. Weiss and Legrand (2011) highlighted innovative thinking as solving problems by discovering, combining, and arranging insights, ideas, and methods in new ways. Innovative teaching requires teachers to stay informed about new pedagogical approaches, technological trends, and educational research to enhance learning experiences for learners. It involves using creative and effective strategies to engage students, foster their learning outcomes, and adapt to the evolving educational landscape. Simplicio (2000) and Sinay (2018) remarked that training fosters innovative thinking skills in students; one could transform the existing classroom into an environment infused with excitement, curiosity, and genuine student learning.

Seechalia (2017) described six types of educational innovation that can make students creative and innovative. The first of them is Media and Educational Technology. It makes teaching-learning interesting, draws students' attention effectively, makes learning accessible and comprehensible, and leads them to learn at their own pace and time. The next is Instructional Technique/Pedagogy. It uses different teaching-learning techniques, such as differentiated instruction and self-regulated learning. The third one is the curriculum. It can promote innovation education from the planning to the implementation phase. The fourth is the educational system. The education system can enhance creativity and innovation in different ways. It can be promoted through cultivating critical thinking and problem-solving skills. Similarly, hands-on activities provide real-world experiences.

Some of the activities for this are field trips, internships, and guest speakers. Assessment innovation is necessary to reduce the dominance of one-size-fits types of assessment (Black & Willam, 1998). The dominant influence of high-stakes testing has been a solid obstacle to promoting creative and innovative skills. It is necessary to rethink traditional assessment methods and incorporate alternative evaluation forms, such as portfolios and performance-based assessments. The last is Administration and Management. It can promote creative and innovative

skills by setting a practical vision and mission. The administrative leaders can align the mutual efforts of the entire team to foster creative and innovative skills in the schools. For this, leaders must shape an inclusive, open, and supportive organizational culture that encourages collaboration, respects diverse perspectives, and rewards innovative efforts.

Professional learning opportunities for teachers, administrators, and students are vital in improving teaching and learning a lot in school. Students become creative when they make heartful efforts in a fair and fearless environment (Abegglen et al., 2016). Similarly, they learn a lot from their teachers, administrators, and peers in the school. In other words, their language, behavior, attitude, and working style greatly influence one another. The teachers and administrators are the role models for the students in the school. Organizing workshops and seminars provides professional learning opportunities. In such programs, they learn and exchange the latest trends, research, and educational best practices, which can change their profession. Peer observation and collaboration are other options for providing teachers, administrators, and students with professional learning opportunities.

Similarly, the opportunities to visit different schools and institutes help them learn from one another. The teachers, administrators, and students observe and exchange constructive feedback. Professional learning communities are another option for teachers, administrators, and students to form or join groups on specific areas of their profession. Additionally, mentorship programs are another option to be efficient professionally. Schools can establish mentor-mentee relationships for personalized guidance. Action research projects help them to stretch ahead toward efficiency. They learn from one another through research and sharing their findings. In this way, small-scale research projects can address specific problems in related fields.

Fostering a creative learning environment is crucial in making students creative and innovative. Cropley (1995) suggested nine points for fostering a creative learning environment. One of them is encouraging students to learn independently. The teachers who promote an innovative learning environment discourage students from embracing rote learning and rigidly following their orders but empower them to learn in their way. The next is having a cooperative and socially integrative teaching style. The other is tolerating ‘sensible’ or bold errors. The proverb ‘to err is human’ empowers students to learn from their mistakes and not to repeat them. The fourth suggestion is that they do not neglect mastery of factual knowledge. The fifth is the promotion of self-evaluation. The sixth is to take every question or issue seriously and think

critically. The seventh is allowing students to work with varied materials under different conditions.

The other suggestion is to help students learn to cope with frustration and failure. As students are likely to experience frustration and fail to achieve the expected goal, the teacher has to support, encourage, and empower them to struggle against frustration and failure. The last one is to reward them for their appropriate courage and attempt.

Teacher's Experiences and Understanding of Creative and Innovative Teaching

Twelve teachers teaching grade-eight students were interviewed with open-ended questionnaires to explore existing efforts and practices and potential options for promoting creative and innovative teaching-learning. Despite some discrepancies in their perception, they agreed that the promotion of creative and innovative teaching-learning strategies should be part of the priority from planning to assessment; the effort employed is insufficient and should be encouraged; there is less attention to making workable efforts to enhance students' creative and innovative skills; and they have direct and indirect pressure to limit such activities and focus on paper-pencil tests.

The teacher participants had positive perceptions of creative and innovative skills and wanted to promote them in students. However, they have ignored them and prioritized teacher-centered methods: explaining the textbook's content, giving keynotes and capsules for paper-pencil tests, and encouraging students to memorize the key points and prepare for the written examination. Three out of the twelve teacher participants said creativity is essential and needed for students, so we have applied the strategies we know but need to be more comprehensive. They also argued that they have employed different activities to make students creative and innovative. As Hari (pseudonym) said, "O*rganizing events and programs to empower students with creative and innovative skills is time-consuming and costly. So, we have employed them loosely.*" The teachers employed teacher-centered, rote-learning based, and written exam-oriented teaching learning as it is more effortless, economical, and time-saving.

As Gardner (1999) argued, creative people are self-confident, ambitious, and passionate about their work. Ferrari et al. (2009) highlighted that teachers must consciously and efficiently design and implement different programs and events to empower students to look for new and other ideas to see, perform, and analyze them. For this, they need more time, money, and effort. Similarly, five teacher participants said they were aware of the creativity and innovative skills

required of the students but had other pressures. Therefore, they cannot promote creative and innovative activities and ignore exam-oriented and mechanical activities. As Kiran (pseudonym) said, "*All the concerned authorities want a better result, the result from the paper-pencil test. So, our main concern is written examination rather than students' creative work and performance.*"

It has led them to work on the textbook: read the text, memorize the key points, and prepare for the examination. Amrein and Berliner (2002) argued that policies of high-stakes testing "increased drop-out rates, teachers' and schools' cheating on exams, and teachers' defection from the profession. The pressure of the concerned authorities (local government, school management, and administration) has affected the teachers' role in preparing the students. Ultimately, the pressure goes on students for rote learning, limiting their efforts to promote creative and innovative skills and employing their efforts for better scores or grades. Besides, the other two participants accepted their ignorance to encourage creative and innovative skills in students. Such teachers feel less trained to help students enhance their creativity (Sinay, 2018). Teachers with creative and innovative skills can empower students with these skills. In the Nepalese context, the teachers have poor skill and art-based training. Similarly, the teachers are directly or indirectly forced to limit creative and innovative events and programs due to limited funds and facilities. One of the admin employees said, "*It is not our want but compulsion*."

Ardipal (2017) highlighted that teacher training in the arts as an educational approach will enable teachers to make changes, overcome difficulties, and enhance their professional pride and confidence. The teacher participants accept that they need to improve their art-based skills. He argued that "when children make art, they explore in-depth, discovering and thinking. Finally, the remaining two say they require an appropriate environment and facilities to promote students' creativity.

Student's Experience of Creative and Innovative Teaching-Learning

Fifteen student participants were interviewed in-depth to explore their experiences of creative and innovative teaching-learning activities. They all have a common understanding that creative and innovative teaching-learning activities are friendly, engaging, and real-life related. However, they are limited and teacher-led. Four out of fifteen perceive creativity as an essential part of teaching-learning but complain about the teachers' force to confine teaching-learning within textbooks and prepare students for the paper-pencil test. One of the students said, "*We have no creativity-fostering environment*."

She further said weak students need more space to express their ideas and create something new and different. Co-curricular and extracurricular activities are designed to enhance creativity and innovative skills, among other skills.

However, they could be better organized to promote creative and innovative skills in students. The activities neither increased students' grades in the assessment nor satisfied the concerned stakeholders' interests and priorities. Another participant said, "*Even the co-curricular activities are not creative-oriented as expected. They are rote-learning-oriented.*"

As they experienced, the quiz contests, which could be planned, organized, and assessed in students' leadership, were run by the teachers' and administrators' order and leadership.

Lien et al. (2022) focused on learning and innovation skills, including critical thinking and problem-solving, creativity and innovation, communication, and collaboration. A creative partnership project is one of the strategies to nurture students with creativity and innovation skills. It involves students collaborating to combine diverse skills, ideas, and resources to create innovative and impactful results. For example, the students in a public school were found to enjoy collaborative efforts to manage their classroom during the initial phase of the academic year. Their collaborative effort to decorate their classroom better than others was sufficiently creative and innovation-oriented. Similarly, students' efforts to plan and organize quiz-contest programs under the teachers' guidelines and supervision were equally creative and innovation-oriented.

Ferrari, Cachia, and Punie (2009) focus on developing students' creative and innovative potential. As a quiz contest is "more than just creativity," students can learn many insights and competencies (academic and transversal) from it. In this program, grade-eight students had to plan and organize a quiz contest program for grades five, six, and seven divided into four houses: Green House, Blue House, Yellow House, and Red House. Grade eight students formed four groups: one had to set questions, ask questions, and perform as a judge. The next group had to schedule the program, notice them, and manage for running the program. The third group was to volunteer, and the last or fourth group was the reporting group, which had to describe the program in detail and critically analyze its strengths and weaknesses. Such programs are creativity, innovation-oriented, and student-centered. However, they are time-consuming, less managed, and beyond traditional practices. So, only a few teachers implement such practices.

Administrator's Roles for Creative and Innovative Teaching-Learning

Administration has a critical role in managing and functioning educational institutions effectively. Administrative employees are responsible for providing facilities, controlling them, and inspecting how they are utilized. On the one hand, they are blamed for insufficient facilities and equipment for the teachers and students, and on the other hand, they are accused of asking for more services for their schools. However, the support and facilities they provide in the schools must be improved to promote creative and innovative teaching-learning activities adequately. The administration has mainly four challenges. One of them is budgeting and resource management. They need more budgets and resources to manage a sufficient, well-qualified, and trained workforce and provide adequate equipment, tools, and materials.

The next challenge is maintaining relationships with community people, parents, and teachers. "*It is almost impossible to maintain a harmonious relationship with the politically, racially, or culturally egoist people*" (an administrator). The administration is always blamed for being biased, corrupt, and irresponsible. It requires advanced leadership skills, fair and friendly behavior, and a broad vision to build and maintain harmonious relationships with the divided people. Almost all the programs are administration-dominant and teacher-led. To promote creativity and innovation in teaching and learning, the concerned authority should play a crucial role in making them teacher-directed, student-dominant, and student-led (Hondzel, 2013). For this, the top-down model of the education system should be integrated with a bottom-up approach.

Strategies for Enhancing Creativity and Innovation in Class

Different strategies can be applied to foster creative and innovative thinking in students. Schools with successful education systems promote personalized, student-centered, and skill-based instructional practices to encourage creative and innovative skills (Sinay, 2018). One of them is the promotion of a differentiated environment. In such environments, students have many more options and opportunities to show their self-created ideas and performances. For example, the students interested in painting create their identities by painting and explaining about the painting. Therefore, the school is required to establish such an environment in the classroom. The following strategy is the promotion of curiosity in students.

The administration and the teachers should encourage a culture of curiosity in the school. Then, the students, having continuous learning support and opportunities for exploration, grow

up with creative and innovative skills. The third strategy is time allocation for reflection. The students should have sufficient time to step back and reflect on their work. It is remarkable that sometimes, the best ideas emerge during quiet contemplation. The other strategy is safe space creation. An environment where the students feel safe and free from domination and discrimination encourages them to grow with creative and innovative skills. The fifth strategy is the provision of varied experiences. The students, having encountered various experiences, have much more information, and by interpreting the data from different experiences, they can generate new ideas.

There are different ways to enhance one's creativity. One of them is fostering a positive and open-minded environment, a creativity-fostering learning environment necessary in an educational setting. The concerned authorities must create a convergent and divergent thinking environment from policy to practice to promote more flexible, creative thinking and problem-solving styles in schools. The next is embracing their diverse perspectives. Everyone has their perception and logic. They want the space to present their views and ideas. The students have open space to present their viewpoints, become more conscious, better prepared, and perform their roles more responsibly.

The teacher's supportive and appreciative response is necessary for encouraging such diverse perspectives. The other is through promoting their curiosity and exploration. The teachers' dry lecture kills students' curiosity. So, they had better avoid such teaching in the class, explain the context, raise the questions, and open the space for the students to think of possible solutions. The fourth and last step is to allow them time for reflection and incubation. As per Kirton (1976), everyone can be located on a continuum ranging from an ability to 'do things better' to an ability to 'do things differently,' the ends of this continuum are labeled adaptive and innovative, respectively.

Findings of the Study

Innovative teaching and learning involve using creative and effective strategies to engage students, enhance learning outcomes, and adapt to the evolving educational landscape. The practice of the activities to promote creative and innovative teaching-learning depends on the role of the administration and management. The study found that creative-based, dialogue-based, performance-based, and game-based activities in a fearless and dignified environment are highly effective for creative and innovative teaching-learning. The study also found that a one-size-fits-

all type of assessment in which a paper-pencil test is a significant tool of high-stakes testing has been a substantial obstacle for promoting creative and innovative-oriented activities.

Conclusion

Rethinking traditional assessment methods and integrating alternative assessment forms is essential. It concludes that a learner-friendly environment, dialogue use, ICT integration, student-centered and performance-based teaching-learning activities, differentiated teaching, and alternative assessment forms are the keys to promoting creative and innovative skills. However, in support of the concerned authority, teachers must encourage students to participate and engage in different teaching-learning activities.

Implications

Any research work only covers some of the tasks of the concerned topic. In this regard, this study has theoretical, behavioral, and research-based implications. Theoretically, it is helpful to policymakers to promote the innovative and creative learning process of school-level learners. Practically, it is useful to the grade teachers, the school administrators, and stakeholders, i.e., students, parents, etc. Finally, apart from this research topic, there are various relevant topics of the study that the research has yet to explore in the recent context. So, such topics, i.e., the teacher's role in managing the creative and constructive classroom, the role of the parents towards their children for 21st-century skills, and the effect of AI on creativity and innovation in the learning process, are some research-based implications that the upcoming generation will explore.

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