www.ijprems.com
editor@ijprems.com

INTERNATIONAL JOURNAL OF PROGRESSIVE RESEARCH IN ENGINEERING MANAGEMENT AND SCIENCE (IJPREMS)
(Int Peer Reviewed Journal)
Vol. 05, Issue 01, January 2025, pp : 275-289

e-ISSN : 2583-1062
Impact Factor : 7.001

CREATIVE THINKING IN MULIG ELEMENTARY SCHOOLS: TEACHERS' PERSPECTIVE AND PRACTICES

Emily C. Pino[1]

[1]Researcher, Rizal Memorial Colleges, Inc

ABSTRACT

Due to globalization, developing countries' companies have a growing need for creative thinking. Consequently, education systems should adjust to societal requirements and improve learning outcomes by incorporating teaching approaches that encourage creative thinking. A study involving eighteen public elementary school teachers (ESTs) aimed to identify their viewpoints regarding creative thinkers, enhancing creative thinking and the roles played by home and school environments in developing students' potential for creativity. The study in Mulig, Toril, Davao City uncovered seven themes, including the importance of creative thinking, the roles of teachers and the curriculum, teaching methods, challenges faced in implementation, the school environment, and the role of education department in promoting creative thinking. While acknowledging the importance of creative thinking, teachers lacked the essential skills to promote it efficiently. Additionally, creative thinking promotion in schools and the curriculum was inadequate. To address this issue, it is essential to train teachers, equip schools with appropriate resources, and enhance the curriculum to foster creative thinking in students.

Keywords- Creative Thinking, Perspective, Practices, Public Schools, Teaching

1. INTRODUCTION

Most educational systems prioritize the accumulation of knowledge, with teachers following rigid curricula and delivering information while students are tested on their retention of that knowledge. While knowledge and expertise are beneficial to creativity (Puccio et al., 2019), this approach leaves little room for exploratory and inquisitive thinking, and skills related to knowledge production may be suppressed. Moreover, students may not have opportunities to fail and learn from their failures (Hays, Kornell, & Bjork, 2019). Thus, creativity is deemed an essential life skill to prepare individuals for an uncertain future, and creative thinking should be considered a fundamental goal of the current education system (Gurak, 2019).

Education systems must be adaptable and flexible to face various challenges that may arise from social, personal, economic, and technological changes (Radovic-Markovic & Lecturer, 2019). Researchers emphasize the need for a high degree of creativity in learning within the education system (Radovic-Markovic & Lecturer, 2019). However, teachers may have their own ideas about what creative thinking means, which can affect their approach to teaching and assessment activities aimed at developing creative thinking (Odena, 2019). Understanding teachers' perspectives on creative thinking is essential to improving professional preparation and instruction (Diakidoy & Kanari, 2019). Teachers suggest that creativity training prepares children to meet challenges (Fischman et al., 2019), and current understandings of creative thinking are still evolving (Forrester & Hui, 2019).

The exposure to diverse cultures and perspectives through globalization has inspired the researcher to approach problem-solving in innovative ways. Furthermore, the use of new communication technologies and platforms has enabled global collaboration, leading to the creation of innovative products, services, and experiences. Social media platforms have also provided a global showcase for creative work. Ultimately, globalization has broadened the scope of creative thinking, resulting in innovative ideas and solutions that can contribute to the betterment of society (De Beule & Nauwelaerts, 2019).

The researcher would like to gain insight into how teachers perceive creative thinking, how they incorporate it into their teaching practices, identify obstacles and facilitators that affect its development, and explore possibilities for improvement and evaluation from their standpoint. The researcher teaches at Mulig Elementary School, a Toril public school within the Toril district of the Division of Davao City.

The purpose of this study is to examine the state of creative skills in an elementary public school through interviews to assess the effect of creative skills on elementary school learners. The study population comprises teachers teaching at the elementary level in Mulig Elementary School, a public school located in the Toril, Davao City area.

The study is guided by the following questions:

1) What are the experiences of teachers about creative thinking of leaners?
2) What are instructional approaches of teachers to motivate students to be creative?
3) What factors promote or prohibit creative skills of the learners in public schools?

The ability to approach things from innovative and unconventional perspectives, use acquired knowledge in new situations, think in exceptional ways, and employ creative methods for unique creations and overcoming obstacles, is what creative thinking entails (Duffy, 2020). One of the central cognitive components of creativity is divergent thinking, which refers to an individual's ability to generate various novel and unconventional solutions to a problem (Guilford, 1999). Additionally, creative thinking involves problem understanding, evaluative skills, inventiveness, exploring ability, and intellectual flexibility for reshuffling (Guilford, 1999).

Kampylis and Berki (2021) define creative thinking as the kind of thinking that allows students to utilize their imagination to generate ideas, hypotheses, and questions, experiment with alternatives, and evaluate their own and their peers' ideas, final products, and processes. Idea production is a significant aspect of creative thinking and consists of several components, including innovation, identification capacity, concern to complexities, initiative fluency, organizational fluency, phrasing fluency, remarking fluency, numbering fluency, and flexibility (Carroll, 2020). The ability to produce unique and useful ideas is assessed by requiring students to generate a sequence of responses quickly rather than relying on traditional beliefs (Anwar & Khizar, 2020; Barbot et al., 2021).

Amabile (2019, 2021) asserted that various classroom factors, including teacher characteristics and behavior, can significantly influence the development of a person's creative thinking. Bateson et al. (2019) also noted the importance of everyday creative thinking in teaching, as it fosters innovation and new construction, which are essential for learning and grow.

In addition, Rahman and Manaf (2019) suggested a significant relationship between creative thinking and educational achievement. Cropley (2020) emphasized that creativity in the classroom can promote interesting learning approaches and facilitate personal growth, stating that conventional teaching practices such as transmission-models, punishment, reward, competition, and evaluation can stifle students' innate creative ability (Sinaga & Feranie, 2019). On the other hand, student-centered, self-directed learning and autonomy in the classroom seem to encourage innovative or novel thinking tendencies (Soh, 2019).

Furthermore, Lilly & Bramwell-Rejskind (2021) suggested that teachers can cultivate a positive learning climate, foster curiosity, and model flexibility. They also believed that fostering their own creative thinking is a precursor to fostering it in their students (Lilly & Bramwell-Rejskind, 2021).

Rashid and Qaisar (2019) emphasize the role of teachers in the educational system is crucial, as their personal and professional development directly impacts student achievement. To meet the changing needs of society, teachers must be aware and trained accordingly, as they play an instrumental role in preparing students for their future (Rashid & Qaisar, 2019). Effective teaching requires an understanding of the intellectual processes involved, which are influenced by an individual's environment, including their formal education. However, research has shown that many teachers feel unprepared to teach certain subjects, such as English literature (Yunus & Suliman, 2019). Humor has been found to have a positive impact on creative thinking, increasing the quantity and quality of ideas generated in groups (Shade & Shade, 2019). However, the emphasis on class room management and completing the curriculum often leads to a serious learning environment, with homework focused on consolidating lessons rather than developing thinking skills (Senel & Bağçeci, 2019).

Guilford (1990) was among the first researchers to discuss the importance of creativity in children's intellectual, educational, and talent development, which, as a behavior, could be expressed as ingenuity, composition, and design. According to Torrance (2019), creativity is a thinking process that helps individuals deal methodically with the various problems and difficulties that they encounter and achieve original solutions. Therefore, creative thinking contributes to social as well as personal progress. Studies on creativity in the 1960s and 1970s focused mainly on divergent thinking, which as Plucker et al. (2019) point out, contributes but is not synonymous to creativity. Creativity has also been studied in relation to imagination. Robinson (2021) considers creativity a form of applied imagination and a process of developing new ideas and putting them into practice to achieve innovation. However, creative production requires purposeful planning and focused work, fueled by knowledge, control and skill.

Recent consideration of creativity emphasizes the dialectical relationship of the individual with the environment for the development of this phenomenon. Plucker et al. (2019) consider creativity to be the interaction between ability, process, and environment with which the individual or a group produces a perceived product that is socially defined as new and useful. According to Csikszentmihalyi (2020), Creativity, with a capital C, is "a process by which a symbolic domain in a culture is changed." The Creative person has strong knowledge of a domain and has connections with the field. However, it is impossible for children to learn a domain and know the field to the point that they could produce something that will change the culture and as Csikszentmihalyi (2020) continues, it is also impossible to tell whether a child will be Creative or not by basing one's judgment on his or her early talents. The author assumes that each person has, potentially, all the psychic energy he/she needs to lead a creative life. In education, creativity, as a group of

personal qualities, an interpersonal and intrapersonal process, and an original product with high quality and intrinsic importance, should be examined in relation with the individual experiences of the creator, the social context, and the product.

The role of teachers in the development of children's creativity is decisive. As Saracho (2022) points out, teachers can promote young children's creative thinking skills and encourage them to endure their creativity by providing a learning context that contributes to the prospect of developing related skills. Educational programs and curriculums emphasize stimulating problem-solving, imagination, reflection, and curiosity to promote children's creativity. The Australian Curriculum Assessment and Reporting Authority (2019), for example, states specifically that creative thinking involves students learning to generate and apply new ideas in specific contexts, seeing existing situations in a new way, identifying alternative explanations, and seeing or making new links that generate a positive outcome. Beghetto (2019) emphasizes that if we want our students to take risks and respond creatively to every challenge, we must show them the way. Pllana (2019) who studied and elaborated on several facts about creativity in 21st-century educational reforms in six countries (United States, India, Chile, Mexico, China, Singapore), found out that creativity is significant to every educational system, despite the dissimilarities in implementing creativity. However, countries that include creativity in their curriculum, may not use it in the classrooms at all. Developing creativity does not require adding extra time for that in the curriculum, instead it requires from teachers to utilize time differently. Despite the clarity of any skill or behavior mentioned in national curriculums, applications of programs for developing creativity depends on teachers' own understandings and interests in this area.

Eddles-Hirsch et al. (2020) provide examples on how to develop creativity by using models and strategies that have been found in the research to be effective evidence based frameworks that foster creativity in an inclusive classroom context. Dominey (2021) conducted research both inside and outside the classroom to explore the relationship between imaginative play and creativity in education and more specifically, to examine the structures, approaches, benefits, and obstacles related to imaginative play and creativity. One of the conclusions from her study was that an individual's creativity is intertwined with the environment and the challenges deriving from it (Dominey, 2021). Teachers have an integral role in setting or transforming the environment as educational context, therefore, they play a key role in cultivating students' creativity. Makris et al. (2021) stressed the important role of teachers in the development of creativity as a conclusion from a research study conducted through a survey that was distributed among primary school music teachers in Cyprus to define their perceptions regarding creativity.

Based on the general acknowledgement of the important role of teachers in developing children's creativity, the authors of this article and instructors in an early childhood education program of a Department of Education at a private Eastern European university, considered important to find out what were their students' thoughts and beliefs about creativity and creative teaching. Before adopting a teaching approach for our courses to promote creativity during a specific semester, we decided to investigate specific students' views on creativity without attempting to generalize our conclusions to the general population of the university student-teachers. This article is a report of a study aiming to describe the perceptions of a group of 15 university early childhood student-teachers regarding creativity and creative teaching and what follows is a summarized description of the research process, results, and conclusions.

Life in the 21st century is marked by great uncertainty, due in part to unprecedented social, economic, and global changes (Beghetto, 2019; Cropley, 2020; Kampylis, 2020; Robinson, 2021). The world is changing more rapidly than ever before (Cropley, 2020). In the last several decades, many of the world's most developed countries have shifted from an industrial economy to a knowledge economy (Sawyer, 2020).

The social demand for creativity has been steadily increasing, since the turn of the century, in almost every field of human activity (Kampylis, 2020). Creativity is at a historical premium - today, creativity is considered to be an essential life skill, which needs to be fostered and promoted by the education system (Craft, 2019) because it has the potential to solve a range of social, political, and economic problems (Burnard & White, 2008; Kampylis, 2020).

Scholars of our "knowledge age" have argued that creativity, innovation, and ingenuity are more important today than ever before (Sawyer, 2020). In our global and wired society, creativity is in demand, cultivated, and rewarded (Gardner, 2020). Creative industries are part of a leading economic sector that is developing at a pace greater than other economic sectors (Florida, 2002); and, include art, design, fashion, architecture, cinema, music, the performing arts, publishing, computer science, mass media, and education (Florida, 2022; Kampylis, 2020). Some claim that we have entered a revolutionary new age, and that this future belongs to a very different kind of mind than the past, including that of synthesizers, creators, and meaning-makers (Gardner, 2020; Robinson, 2019).

Consequently, creative thinking is regarded today as a commodity and a key "employability" skill, as well as a key factor of human capital (Florida, 2022; Gardner, 2020; Kampylis, 2020; Robinson, 2019). However, the

conceptualization of human creativity as a commodity—and an accompanying globalized market approach to creativity in education (Beghetto, 2019)—raises many concerns—among researchers, including this one— about its use in simply meeting the needs of the modern capitalist economy (Craft, 2019) rather than the common good (Banaji & Burn, 2019; Craft, 2019). This motivation for the cultivation of creativity can have …"potentially destructive and ethically questionable ecological and cultural consequences" (Beghetto, 2019). A wise creativity in education is needed—one that takes into account multiple needs and perspectives (Craft, 2019). Outside capitalistic drives, a broader understanding of human creativity reveals that it has many marked benefits for people's personal lives as well as for society as a whole. Personality theorist Rogers (1961) defined creativity as no less than a vital life force (Feldman & Benjamin, 2019), and Maslow included creativity as part of self-actualization in his theory of motivation (Richards, 2020). Creativity appears to be an important component of healthy social and emotional well-being (Plucker et al., 2019), and the use of creative abilities to solve relevant problems in one's life can contribute to one's overall success, both personal and financial (Sternberg & Lubart, 2019). In any case, although it is clear that modern creative industries require creative employees, 21st century education systems are still based on the needs of 19th-century industries (Darling-Hammond, 2020; Robinson, 2021; Sawyer, 2021), in which "there was little room for originality on a production line" (Kampylis, 2020).

The rapidly changing global marketplace and requirements of the 21st century have put a special emphasis on the need for creative thinking. This has brought increased international attention to the ineffectiveness of traditional pedagogies in preparing students for the demands of the next century (Darling-Hammond, 2020; Hartley, 2019; Kampylis, 2020). Based on these new socioeconomic demands, and on learning theories like those of Dewey, Bruner, Piaget, and Vygotsky, the fostering of students' creative thinking is held as a key education goal, by a number of education systems, including Australia, China, Finland, Greece, Hong Kong, and the United Kingdom (Kampylis, 2020) and has had an increased emphasis in Belgium, Brazil, Canada, Denmark, France, Iceland, Japan, Macau, The Netherlands, Northern Ireland, New Zealand, Qatar, Scotland, Serbia, Singapore, Turkey, Sweden, Switzerland, Taiwan, Wales, USA (Craft, 2019).

The most influential theoretical model that is used to account for differences, including differences in interpretations, remains Csikszentmihalyi's systems model (2019). The systems model of creativity proposes that creativity is a "process that can be observed only at the intersection where individuals, domains, and fields interact," offering recognition to elements overlooked by purely psychological approaches to creativity, which tend to focus on the individual. With this model, the 'domain' refers to the discipline's "existing objects, rules, representations, or notations." Csikszentmihalyi explains that creativity occurs when a relatively permanent change is made to the domain by an 'individual'. Not all changes are accepted, however, and thus, the 'field' refers to the actors or groups who act as gatekeepers to determine which changes are sustained over time. Though the systems model of creativity represented a considerable development in creativity theory in that it acknowledged factors beyond the individual mind, the domain and the field elements of the system remain undertheorized, and their connection to the individual thus remains fragile. Glăveanu (2019), for instance, explains that "we are missing . . . a theory that relates . . . individual-level outcomes to the social and cultural contexts that help them come into being".

It is within this context that we undertake the current qualitative study. To make sense of the data, we draw on sociological theory, here, Legitimation Code Theory (LCT), to conceptualize the nature of creativity as viewed through different disciplinary perspectives. That is, we use LCT to provide a way to characterize knowledge, or Csikszentmihalyi's 'domain'. In this research, the domains of interest include the academic disciplines of physics, history, and poetry. In this research, we consider the academic fields of physics, history, and poetry because they represent the considerable variation in knowledge and inquiry practices identified in scientific and social sciences fields (MacDonald, 2020). Such a comparative approach has proven useful in studies of literacy and sociology, where studying an object in relation to others provides insight beyond study of the one object in isolation (McLean, Georgiou, Matruglio, Turney, Gardiner, Jones, Edwards-Groves, 2021; Christie, Maton, 2021). In studying creativity through the lens of these three disciplines, we also hope to understand the nature of creativity within and across disciplines in a more detailed way.

2. METHODOLOGY

The study utilized a qualitative methodology to investigate the views and methods employed by elementary school teachers to foster creative thinking among their learners. The approach used was qualitative through interviews and group discussions.

The objective was to gain insight into how teachers perceive creative thinking, how they incorporate it into their teaching practices, identify obstacles and facilitators that affect its development, and explore possibilities for improvement and evaluation from their standpoint.

The school was chosen using purposive sampling, and interviews were conducted with teachers teaching in public schools for this research. The study involved a total of eighteen (18) teachers who narrated their sentiments about creative learners.

The standardized open-ended interview is extremely structured in terms of the wording of the questions. Participants are always asked identical questions, but the questions are worded so that responses are open-ended (Gall, Gall, & Borg, 2019). This open-endedness allows the participants to contribute as much detailed information as they desire and it also allows the researcher to ask probing questions as a means of follow-up.

Standardized open-ended interviews are likely the most popular form of interviewing utilized in research studies because of the nature of the open-ended questions, allowing the participants to fully express their viewpoints and experiences. If one were to identify weaknesses with open-ended interviewing, they would likely identify the difficulty with coding the data (Creswell, 2013). Since open-ended interviews in composition call for participants to fully express their responses in as much detail as desired, it can be quite difficult for researchers to extract similar themes or codes from the interview transcripts as they would with less open-ended responses. Although the data provided by participants are rich and thick with qualitative data, it can be a more cumbersome process for the researcher to sift through the narrative responses in order to fully and accurately reflect an overall perspective of all interview responses through the coding process.

As with other sections of interview design, McNamara (2019) makes some excellent recommendations for the implementation stage of the interview process. He includes the following tips for interview implementation: (a) occasionally verify the tape recorder (if used) is working; (b) ask one question at a time; (c) attempt to remain as neutral as possible (that is, don't show strong emotional reactions to their responses; (d) encourage responses with occasional nods of the head, "uh huh"s, etc.; (e) be careful about the appearance when note taking (that is, if you jump to take a note, it may appear as if you're surprised or very pleased about an answer, which may influence answers to future questions); (f) provide transition between major topics, e.g., "we've been talking about.(some topic) and now I'd like to move on to (another topic);" (g) don't lose control of the interview (this can occur when respondents stray to another topic, take so long to answer a question that times begins to run out, or even begin asking questions to the interviewer). However, according to Gall, Gall, and Borg (2019), this reduces researcher biases within the study, particularly when the interviewing process involves many participants.

The data obtained from the interviews was analyzed using the thematic analysis method, which involves identifying patterns or themes within qualitative data (Braun & Clarke, 2021). Thematic analysis is considered a foundational method for qualitative analysis due to the diverse, complex, and challenging nature of qualitative approaches (Holloway & Todres, 2019).

The data was analyzed according to the main themes identified in the semi-structured interview protocol, and open coding was used to ensure that all relevant information was incorporated into the study and analyzed through thematic analysis. As a result, seven main themes were identified from the interview questions.

Thematic analyses were used to analyze the recorded and transcribed responses of the participants. It requires more involvement and interpretation from the researcher. Thematic analyses move beyond counting explicit words or phrases and focus on identifying and describing both implicit and explicit ideas within the data, that is, themes. Codes are then typically developed to represent the identified themes and applied or linked to raw data as summary markers for later analysis. Such analyses may or may not include the following: comparing code frequencies, identifying code co-occurrence, and graphically displaying relationships between codes within the data set.

Generally speaking, reliability is of greater concern with thematic analysis than with word-based analyses because more interpretation goes into defining the data items (i.e., codes) as well as applying the codes to chunks of text. This issue is even more pronounced when working in teams with multiple analysts. To maintain rigor, strategies for monitoring and improving inter-coder agreement, and therefore reliability, should be implemented in the analytic process. Despite these few issues related to reliability, we feel that a thematic analysis is still the most useful in capturing the complexities of meaning within a textual data set. It is also the most commonly used method of analysis in qualitative research.

Thematic analysis focuses on identifiable themes and patterns of living and/or behavior. The first step is to collect the data. Audiotapes should be collected to study the talk of a session interview (Spradley, 2019). From the transcribed conversations, patterns of experiences can be listed. These can come from direct quotes or paraphrasing common ideas.

Just as in quantitative research, the academic rigor of the research namely its ‘‘validity and reliability’’ is extremely important to the qualitative researcher and, therefore, demands much attention. Depending on the type of qualitative

research, there are differing perspectives on how to address the quality or rigor or the trustworthiness of the study. However, all agree that the research has to demonstrate 'truth value' and this should be consistent in the terms and methods used to demonstrate this. The trustworthiness of the study is supported by providing examples of raw data (often interview quotes) and an analysis process that exemplifies the results.

3. RESULT

Experiences of teachers about creative thinking of leaners

The study's primary discoveries concerning this interview inquiry demonstrated that the teachers who participated defined creative thinking in a broad and contextual manner. While they incorporated universal definitions of creative thinking, they also provided context-specific definitions that were specific to teachers and their classrooms. This encompassed a focus on student-centered creative teaching, an acknowledgment that creative thinking is within everyone's reach, and a continuous cultivation of a creative thinking mindset within their classrooms.

Instructional approaches of teachers to motivate students to be creative

Approach 1. Appropriate Curriculum. On the other hand, approximately 88% participants were against the curriculum structure, they described that the curriculum focuses more on the cramming rather than creative thinking. Some have the opinions about the syllabus should be short enough to give time and space to the students to think in a creative way. On asking about the role of curriculum in promoting creative thinking among the students, teachers showed a mixed response, some (55%) were in the favor of the curriculum, and some (45%) were not.

Approach 2. Reading Biographies and Autobiographies. One approach to fostering students' creativity is through reading biographies and autobiographies of individuals who have demonstrated creative breakthroughs in various fields. By examining their development, the discovery of their own talent, and the process they used to make a contribution, students gain deeper insights into what it means to be creative in a specific domain.

Approach 3. Strong Emotional Support of Students. The satisfaction and success of the teacher-student relationship can be attributed to the dual perspective of meeting both the needs of students, which is achieved through the provision of a strong emotional support base and the demonstration of high-level functioning in a field by teachers.

Approach 4. Training and Seminars on Creative Thinking. Thus, there is a pressing need for more teacher training programs to equip teachers with the necessary methods to develop creative thinking skills during their lectures.

Factors that promote or prohibit creative skills of the learners in public schools

The major obstacles the teacher face is resources, time, space, incompetency, and no attention on teacher's training program about creative thinking. Almost all the participants agreed on a point that due to the shortage of time, lack of materials, academic counseling, parental involvement, and change in pedagogy. it is nearly impossible for them to conduct any activity which could promote creative thinking among the students.

Analysis

On asking about the word "Creative Thinking", all the participants in the current study advocated the importance of creative thinking in teaching and learning process, but many of them have no idea how to promote creativity practically among the students. Just few of the teachers had know-how in recognizing a creative child. In general, creativity and creative thinking can be considered synonymous terms. To delve further into this concept, it can be argued that creative thinking is a cognitive process, while creativity is the outcome of that process. The idea of creative thinking has been around for a long time, dating back to antiquity and the early Greeks (Starko, 2020).

Most of the teachers agree on a point that the creative children are those who can write something by themselves, if any topic is provided to them. They have the ability to create or generate different ideas and have the capacity to imagine things and reasoning thinking in a good way.

Some teachers believe that the creative child has a very active and sharp mind, which help them to think rationally and logically. Moreover, the creative children are the happier ones because they found pleasure in thinking creatively.

Breaking from routine and trying new approaches is key to fostering creative thinking in daily life. Teachers must act as dedicated coaches to inspire students to develop creative thinking skills.

Like other teachers, a teacher did suggest being creative is an innate disposition. When asked if some people are more creative than others from birth, his response was, "Yes, definitely." Such beliefs are not unusual as, even, academics are divided as to such dispositions; more important is the faith it can be improved (Amabile, 2019). As his practice around the activity unfolds, this teacher may be cognizant of students' potential for being creative regardless of background.

Bearing in mind the advice from researchers for teachers to examine and understand their creativity to build a classroom of creative thinkers (Piirto, 2019; Sternberg, 2019), this teacher was asked if he saw himself as creative. He

saw himself as, "not too bad." This view is thought-provoking in light of his belief that some people are born more creative than others. It indicates he feels he was born reasonably creative, yet he could be suggesting with, "I love teaching maths," that loving his subject and, possibly practicing or consolidating his craft has allowed him to be more creative and therefore "survive." Seeing creativity as a process reflects the importance placed on practicing capabilities to improve (Haslam et al., 2019).

There are some internal and external hurdles which involved in the creative thinking. The students' intelligence, personality and psychoticism play an important role in promoting creative thinking. Moreover, teachers are unexperienced, uneducated and unaware of the modern teaching methodologies. External Factors include environment (school, home, classroom), syllabus and resources. Many creative thinking methods work best when they're done in a group and discussion without any materialistic aid. Developing new ideas together can strengthen bonds and help to combine ideas to create something truly innovative. Creative thinking allows trying on perspectives that may not have considered before. For example, they might think an empty cardboard box is ready for the recycling bin, but to a child that box can become a doll house, a submarine, a spaceship, or any number of fascinating places. It is essential that children are able and assisted to choose from a variety of materials to learn what media work best to express their ideas.

Schools have several options to promote creativity in their students, including fostering a culture of discipline, freedom, and collaboration among students. Research on talent development indicates that schools should adopt a more facilitative approach to learning rather than a directive one, as suggested by Schinke et al. (2019). Additionally, academic counseling is a vital technique that schools should employ to assist students in identifying their interests and strengths.

Although not a new concept, parental involvement in schools and communities remains essential to improving the quality of education that their children receive. According to Stelmack (2019), such involvement can positively impact student learning across all grade levels. However, the impact of social support, including any potentially useful information, can have either positive or negative effects. Grolnick and Slowiaczek (2019) proposed a combined approach to parental involvement in children's education, integrating both constructive development and education, with a common definition and specific dimensions. Parental involvement involves the allocation of resources by parents to support their children's education.

The data revealed that teachers are inefficient in encouraging students to use creative thinking skills in the classroom. The findings indicated that teachers require training to improve skills that are constructive to combat with modern era requirements. Therefore, there is a need of introducing teacher training program and workshops to support creative thinking among the students. The education department should also focus on the curriculum development and manage more funds in order to have all the resources which is required for the activities and creative projects of a particular schools.

As the importance of creativity in the classroom began to emerge so did tools for the classroom. The most well-known is mind-mapping - invented by the psychologist Tony Buzan (2019) - who saw these as a break from linear thinking to using the whole brain; and the use of what if? questions. Piirto (2019) argued that many of the published strategies, for example, de Bono's thinking hats, were originally designed for industry; they were not necessarily used by those widely recognized as creative and fall short in most areas of the curriculum. To teach for creativity, one must have been through the creative process itself and it is suggested that teachers who believe they are not creative will struggle in nurturing creativity in their students (Piirto, 2019). It has been noted that in a creative teacher's classroom students are more engaged and cooperative (Kiely, 2019; Lilly & Bramwell-Rejskind, 2021) and such teachers allow students to be creative. Alongside brainstorming, what if? questioning, the use of thinking hats and lateral thinking, other strategies are now gaining favor. In Harris and de Bruin's (2019) Australian and Singaporean study aiming to inform trainee teachers of creative ecologies, responses of teachers noted the efficacy of questioning, empathy, and trust-building through providing a safe environment to encourage creative pursuits. In a systematic review of conditions that promote creativity in the classroom, the list included flexibility concerning pedagogy and physical space as well as using play and games for learning (Davies et al., 2019).

Teaching creatively does not ensure creativity in the classroom. Some teachers may succeed in creatively fostering creativity with "talk and chalk" far more than a teacher employing any number of suggested approaches. However, there is some evidence to suggest that "we teach who we are" and that through modelling of creativity the teacher will encourage and inspire students to emulate risk-taking and be curious (Henriksen & Mishra, 2019). A deep subject knowledge; knowledge of students and how they learn; an environment where students feel able to share ideas, challenge others and have a unique voice all provide the backbone for students' creativity to flourish (Saebø, McCammon, & O'Farrell, 2019).

INTERNATIONAL JOURNAL OF PROGRESSIVE RESEARCH IN ENGINEERING MANAGEMENT AND SCIENCE (IJPREMS)
(Int Peer Reviewed Journal)
Vol. 05, Issue 01, January 2025, pp : 275-289
www.ijprems.com
editor@ijprems.com
e-ISSN : 2583-1062
Impact Factor : 7.001

Ideally, teachers should be moving towards what McWilliam called "Meddler in the Middle" a co-constructor of knowledge, which encourages self-management in learners. Taking this role allows students to be more comfortable taking intellectual risks (McWilliam, 2019). Davies Newton, and Newton (2019) in their systematic review of pedagogies, highlighted the flexibility of pedagogical choices stressing that teachers find a balance between student autonomy and boundary setting. Certain creative pedagogies have been highlighted in connection to certain strategies such as dialogical practice, experimentation, the use of play, giving space and encouraging uncertainties.

It has been suggested that, to cultivate students' thinking, there must be more change in pedagogy, that change must be embedded in the school (Sawyer, 2019) and visible (Ritchhart & Perkins, 2019). Change is challenging and, in most large organizations, is usually (practicably) slow. In the 1980s there was a call for schools to make their culture visible and embedded within their community, as fundamental to success (Deal & Kennedy, 2019). Collaboration was highlighted as a crucial constituent in school improvement (Hopkins, Harris, & Jackson, 2019; Reynolds, 2019) suggesting any new ideas/proposals (such as a new curriculum) were likely to be successfully implemented in a community of collaboration. As von Oech (2019) argued, "There are precious few Einsteins among us. Most brilliance arises from ordinary people working together in extraordinary ways." Despite such callings, collaborative learning is still being called for in the 21st century (Le et al., 2019; Slater, 2019) and especially connected to creativity. Creativity is no longer seen as only belonging to the individual but can be a shared asset (Fautley & Savage, 2020; Sawyer, 2019).

The reality is that the creativity required to fulfil the demands of the workplace, often, will be in group situations: think tanks, working parties' advocacy groups are where new recommendations are often formulated (Slater, 2019). Using cooperative and collaborative learning in the classroom allows for social interactions which will serve students well in the real world as well as allowing for what Vygotsky (2014) advocated as essential: processing on two levels (social then personal).

The benefits of group collaboration can be beneficial as such work can raise performance (Le et al., 2019), share strengths and weaknesses (Huckman & Pisano, 2019) and allow for a range of viewpoints (Baguley, Kerby, MacDonald, & Cruickshank, 2020) which may result in more efficient outcomes (Sawyer, 2020). Cooperative learning was an approach used in a study of secondary school students where the invention process was the theme. Plucker and Gorman (2019) found that not only did students value the diversity of group work but, when interviewed a year later, maintained those beliefs. If a school is to embrace creativity in its classrooms, a collaborative environment can help to externalise concepts and encourage metacognition. Collaborative pedagogies do not come without complications (Baguley et al., 2020), one being the importance of building group trust for students to willingly participate (Burnard & White, 2019; Piirto, 2019). Another complication is that if a group is to create successfully, a shared set of understandings and values is vital (Cullen & Johnston, 2020). If assessment is required, there are complexities around individual/group grades but if the collaboration is formative assessment, it becomes what Sawyer (2021) called "distributed creativity," as group members share a creative product collectively. Glaveanu (2019) called collaborative pedagogy, the "We-paradigm of creativity/"

4. DISCUSSION

The following are instructional approaches use by teacher in promoting creativity in the classroom:

No strategy can produce a creative student or teacher; what follows are approaches which have been highlighted as particular possibilities for creativity in the classroom. Students require the necessary information in their domain area in order to have competence for making judgements and to be flexible with their ideas (Gregory, Hardiman, Yarmolinskaya, Rinne, & Limb, 2019). More important, is how these approaches may be used and whether these "strategies" make learning more meaningful.

Metacognition. The term "metacognition," usually attributed to Flavell (2019), refers to what we know about our cognitive processes and how we can use that knowledge to check, regulate and coordinate these processes towards a specific goal (Puryear, 2019).

Considering this research sees creativity as socially, culturally and historically constructed, the theoretical issue of where metacognition resides is ambiguous (Papleontiou-Louca, 2019). Thinking about thinking supposes a conscious awareness of one's thinking (Yilmaz-Tuzun & Topcu, 2020). Sociocultural theory, relying on Vygotsky's assertions, claims socially formed and mediated activity is the provider of our understanding of consciousness. Although Vygotsky did not know the term "metacognition", he intimated its understanding (Karpov & Haywood, 2019). Metacognition associated with sociocultural theory contends that higher levels of thinking are facilitated, translated, and grouped in a socially, culturally, and historically positioned activity, which is then mediated (Cross, 2020). Harris, Graham and Brindel (2021) suggested that Vygotsky's theories of cognitive development are "integral" to a current, academic understanding of metacognition.

Although the importance of metacognition is now widely acknowledged, we still lack an adequate theoretical model for explaining the mechanisms of self-monitoring and self-regulation and understand too little about how metacognition and other aspects of thinking mathematically cohere to give individuals their mathematical "point of view." (Goos, Galbraith, & Renshaw, 2022).

For this study, metacognition cannot be ignored. Teachers are responding to the curriculum where the term appears at every level of learning development and, therefore, it is imperative to consider its implications. Van de Kamp, Admiraal, van Drie and Rijlaarsdam (2021) found that use of metacognition employing instruction had a positive effect on student outcome.

Empathy. Perhaps the ultimate metaphor for creativity is empathy. Empathy is often seen as a mainstay of the English/drama classroom. In understanding the thinking of another character, one may more fully understand motive and develop an understanding of the world in question. Empathy is a useful thinking tool for all classrooms as well as moving students to be more compassionate citizens (Yaniv, 2021). It may be as straightforward as asking a student to take the perspective of another gender or culture. Students are extremely capable of seeing the world from a variety of perspectives (Dolby, 2020) and by encouraging empathic thinking students will not only exercise creative imagination but allow an opportunity to see things through new eyes (Sawyer, 2020). Thinking empathically (caring thinking) gives all other thinking some moral worth as we strive to experience what others do by placing ourselves in their situation with the aim of shared experience. It involves imagination and does not mean we have to share the other's views - simply understand them (Lipman, 2020).

Play/experimenting. Play is commonly ascribed to children, especially in the classroom: the messy classroom, students out of seats experimenting - and walls covered in artwork maybe music playing,

However, playing with ideas, intellectual playfulness whether structured or not, both engage students and help them create (Brown & Vaughan, 2020; Fisher, Hirsch-Pasek, Golinkoff, Singer, & Berk, 2021). These experiences could include students choosing their activities, tactile experiences, building models, science through inquiry and particularly playing with ideas: the what if? questions.

We accept that adolescents need to play outside of the classroom, in extra-curricular activities, for well-being and roundedness (drama, sport, music etc.).

Teachers indicate they would like to spend more time on intellectually playful activities but there is no time in the current climate (Harris & de Bruin, 2018; Lawless & Pellegrino, 2019; Ponticell, 2020). Even if there was time, some teachers feel uneasy about how to manage activities both in their production and behavioural expectations (Dadds &Hawes, 2020) or they do not see the value (Eberle, 2019). Fine (2019), in her essay exploring how secondary classrooms can become rigorous and engaging at the same time, stated: "Nowhere is this more apparent than in the way that high schools tend to treat play, which, far from being leveraged into deep learning, is seen at best as peripheral and at worst as deviant."

Asking Questions. Fostering creativity does not boil down to a list of techniques. Simply asking what if? questions without further investigation, will not, necessarily, promote creativity. Indeed, students will eventually realize there is little investment in responding to questions which are not valued or explored. Such questions need greater inquiry and conversation for deep learning to be transferable to new challenges (Gregory et al., 2019; Wilhelm, 2020). However, Craft (2019) described this as "possibility thinking" in the sense it moves the learner to consider "what might be" rather than "what is." Moreover, Craft maintained that as students become more used to possibility thinking, collaborative thinking takes on greater import as older students are progressively fascinated by what if? questions and seek others' answers (Craft, 2019). If teachers accept that such learning is acquired through cultural assimilation, and also made emphatic (Bakhtin, Emerson, & Holquist, 2020), it can become inwardly effectual.

Fautley and Savage (2007) argued that teachers could demonstrate/model answers they would like to emphasize by providing a more specific example of Sternberg's proposal of teachers modelling creativity (Sternberg, 2020). Sternberg stressed teachers can model creativity by questioning assumptions. In doing so the teacher is demonstrating to students their lack of knowledge and allows students to remodel their thinking (Sternberg 2020). Wilhelm (2020) insisted the questions be genuine, open to a variety of views, probing and inferential. He further emphasized the importance of listening, both by teachers and students, going so far as to suggest teachers should teach with their "mouths shut" which will enable students to hear their own and others' voices.

5. CONCLUSION

Overall, the present study offers both theoretical and practical insights into the development of children's creativity. Theoretically speaking, our findings highlight the need for going beyond the impact of parenting style. Nevertheless, researcher recommend to incorporate other parental dimensions such as socioeconomic status and work–life balance in their research to identify the unique impact of each dimension in contributing to children's creativity.

On the other hand, our results reveal the strategies commonly used by parents to boost creativity among public school students. The findings not only can serve as a reference for young parents who lack ideas on how to cultivate creativity but also offer suggestions to policy makers on the role they can play in encouraging students' creativity. For example, flexible working hours may be considered for working parents to allocate time for their children.

Despite the strengths indicated above, the present study contains some limitations that ought to be addressed. First, although the researchers had recruited a similar number of fathers and mothers, it is noteworthy that only the mother or the father of a family was interviewed. Some of the participants indicated that their spouse plays a complementary role in encouraging their children to unleash creativity. For instance, when a child is going to explore new things, the mother would provide emotional support while the father would walk the child through the process. It is believed that both mother and father may hold different perspectives on creativity and its development.

Future studies, therefore, may replicate the present study and interview both parents to understand if there is any interaction between mother and father. Second, the sample only comprised the three major ethnic groups. The findings are premature to generalize to other racial groups. Furthermore, the sociodemographic background was not taken into consideration in the present study. As revealed by our participants, financial pressure is one of the barriers for the parents to nurture the creativity of their children. Hence, it is intriguing and meaningful to explore and understand the differences between families with high and low socioeconomic status, as well as between families in urban and rural areas in the efforts of enhancing overall children's creativity.

6. REFERENCES

[1] Puccio, G. J., & Cabra, J. F. (2019). Idea Generation and Idea Evaluation: Cognitive Skills and Deliberate Practices. In Handbook of Organizational Creativity (pp. 189-215). Academic Press. https://doi.org/10.1016/B978-0-12-374714-3.00009-4

[2] Hays, M. J., Kornell, N., & Bjork, R. A. (2019). When and Why a Failed Test Potentiates the Effectiveness of Subsequent Study. Journal of Experimental Psychology: Learning, Memory, and Cognition, 39, 290. https://doi.org/10.1037/a0028468

[3] Gurak-Ozdemir, S. (2019). Teachers' Perceptions of Students' Creativity Characteristics.

[4] Radovic-Markovic, M., & Lecturer, D. M. (2019). Creative Education and New Learning as Means of Encouraging Creativity, Original Thinking and Entrepreneurship. In International Conference on Humanities and the Contemporary World.

[5] Odena, O. (2019). Developing a Framework for the Study of Teachers' Views of Creativity in Music Education. Goldsmiths Journal of Education, 4, 59-67.

[6] Diakidoy, I. A. N., & Kanari, E. (2019). Student Teachers' Beliefs about Creativity. British Educational Research Journal, 25, 225-243. https://doi.org/10.1080/0141192990250206

[7] Fischman, W., DiBara, J. A., & Gardner, H. (2019). Creating Good Education against the Odds. Cambridge Journal of Education, 36, 383-398. https://doi.org/10.1080/03057640600866007

[8] Forrester, V., & Hui, A. (2019). Creativity in the Hong Kong Classroom: What Is the Contextual Practice? Thinking Skills and Creativity, 2, 30-38. https://doi.org/10.1016/j.tsc.2006.10.003

[9] De Beule, F., & Nauwelaerts, Y. (2019). Innovation and Creativity. Edward Elgar Publishing. https://doi.org/10.4337/9781781004333

[10] Duffy, B. (2020). Supporting Imagination and Creativity in the Early Years. Open University.

[11] Guilford, J. (1999). Three Faces of Intellect. The American Psychologist, 14, 479-496. https://doi.org/10.1037/h0046827

[12] Kampylis, P., & Berki, E. (2021). Nurturing Creative Thinking. International Academy of Education.

[13] Carroll, J. B. (2020). Human Cognitive Abilities: A Survey of Factor-Analytic Studies (No. 1). Cambridge University Press. https://doi.org/10.1017/CBO9780511571312

[14] Anwar, M., & Khizar, A. (2020). Relationship of Creative Thinking with the Academic Achievements of Secondary School Students. International Interdisciplinary Journal of Education, 1, 44-47.

[15] Barbot, B., Besançon, M., & I Lubart, T. (2021). Assessing Creativity in the Classroom. The Open Education Journal, 4, 58-66. https://doi.org/10.2174/1874920801104010058

[16] Amabile, T. (2019). Motivation and creativity: Effects of motivational orientation on creative writers. Journal of Personality and Social Psychology, 48(2), 393-399.

[17] Amabile, T. M., Conti, R., Coon, H., Lazenby, J., & Herron, M. (2021). Assessing the Work Environment for Creativity. Academy of Management Journal, 39, 1154-1184. https://doi.org/10.5465/256995

[18] Bateson, P., Bateson, P. P. G., & Martin, P. (2019). Play, Playfulness, Creativity and Innovation. Cambridge University Press. https://doi.org/10.1017/CBO9781139057691

[19] Rahman, S. A., & Manaf, N. F. A. (2019). A Critical Analysis of Bloom's Taxonomy in Teaching Creative and Critical Thinking Skills in Malaysia through English Literature. English Language Teaching, 10, 245-256. https://doi.org/10.5539/elt.v10n9p245

[20] Cropley, M., & MacLeod, A. K. (2020). Dysphoria, Attributional Reasoning and Future Event Probability. Clinical Psychology & Psychotherapy, 10, 220-227. https://doi.org/10.1002/cpp.360

[21] Sinaga, P., & Feranie, S. (2019). Enhancing Critical Thinking Skills and Writing Skills through the Variation in Non-Traditional Writing Task. International Journal of Instruction, 10, 69-84. https://doi.org/10.12973/iji.2017.1025a

[22] Soh, K. (2019). Fostering Student Creativity through Teacher Behaviors. Thinking Skills and Creativity, 23, 58-66. https://doi.org/10.1016/j.tsc.2016.11.002

[23] Lilly, F. R., & Bramwell-Rejskind, G. (2021). The dynamics of creative teaching. Journal of Creative Behavior, 38(2), 102-124.

[24] Rashid, S., & Qaisar, S. (2019). Developing Critical Thinking through Questioning Strategy among Fourth Grade Students. Bulletin of Education and Research, 38, 153-168.

[25] Yunus, M. M., & Suliman, A. (2019). Information & Communication Technology (ICT) Tools in Teaching and Learning Literature Component in Malaysian Secondary Schools. Asian Social Science, 10, 136. https://doi.org/10.5539/ass.v10n7p136

[26] Shade, R., & Shade, P. G. (2019). The Importance of IQ, MIQ, EQ, HQ & CQ! Torrance Journal for Applied Creativity, 1, 39-49.

[27] Senel, M., & Bagçeci, B. (2019). Development of Creative Thinking Skills of Students through Journal Writing. International Journal of Progressive Education, 15, 216-237. https://doi.org/10.29329/ijpe.2019.212.15

[28] Guilford, J. P. (1990). Creativity. Am. Psychol. 5, 444–454. doi: 10.1037/ h0063487

[29] Torrance, E. P. (2019). Must creative development be left to chance? Gift. Child Q. 6, 41–44. doi: 10.1177/001698626200600201

[30] Plucker, J. A., Beghetto, R. A., & Dow, G. T. (2019). Why Isn't Creativity More Important to Educational Psychologists? Potentials, Pitfalls, and Future Directions in Creativity Research. Educational Psychologist, 39, 83-96. https://doi.org/10.1207/s15326985ep3902_1

[31] Robinson, P. (2021). Task-Based Language Learning. Ann Arbor, MI: Language Learning Research Club, University of Michigan.

[32] Csikszentmihalyi, M. (2019). Implications of a systems perspective for the study of creativity. In Handbook of Creativity; Sternberg, R.J., Ed.; Cambridge University Press: Cambridge, UK, 1999; pp. 313–328

[33] Saracho, O. (2022). Young Children's creativity and pretend play. Early Child Dev. Care 172, 431–438. doi: 10.1080/03004430214553

[34] ACARA (2019). Cultural and Creative Activity Satellite Accounts, 2016-17. https://www.abs.gov.au/ausstats/abs@.nsf/Lookup/by%20Subject/5252.0~2016-17~Mai n%20Features~Economic%20summary~4

[35] Eddles-Hirsch, K., Kennedy-Clark, S., and Francis, T. (2020). Developing creativity through authentic programming in the inclusive classroom. Education 48, 909–918. doi: 10.1080/03004279.2019.1670714

[36] Dominey, H. (2021). Evoking never never land: the importance of imaginative play and creativity. LEARNing Landscapes 14, 45–66. doi: 10.36510/learnland. v14i1.1043

[37] Makris, S., Welch, G. F., and Himonides, E. (2021). Music Teachers' perceptions of, and approaches to, creativity in the Greek-Cypriot primary education. J. Creative Behav. 56, 92–107. doi: 10.1002/jocb.518

[38] Beghetto, R. A. (2019). Seven resolutions for responding creatively to uncertainty in the classroom. Available at: https://www.edweek.org/tm/articles/2017/01/04/seven-resolutions-for-responding-creatively-to-uncertainty.html?cmp=em

[39] Kampylis, P. (2020). Fostering Creative Thinking: The Role of Primary Teachers (No. 115). University of Jyväskylä.

[40] Sawyer, K. (2020). A call to action: The challenges of creative teaching and learning. Teachers College Record, 117(10), 1-34.

[41] Burnard, P., & White, J. (2019). Creativity and performativity: Counterpoints in British and Australian education. British Educational Research Journal, 34(5), 667-682.

[42] Gardner, R.C. (2020) Motivation and Second Language Acquisition. Porta Linguarum, 8, 9-20.

[43] Florida, R. (2022). The Rise of the Creative Class and How It's Transforming Work, Leisure, Community and Everyday Life. New York: Basic Books.

[44] Beghetto, R. A. (2019). Seven resolutions for responding creatively to uncertainty in the classroom. Available at: https://www.edweek.org/tm/articles/2017/01/04/seven-resolutions-for-responding-creatively-to-uncertainty.html?cmp=em

[45] Craft, A. (2019). Possibility thinking: From what is to what might be. The Routledge International Handbook of Research on Teaching Thinking, 153-167.

[46] Banaji, S. and Burn, A. (2019). The rhetorics of creativity: A review of the literature. London: Arts Council England.

[47] Rogers, CR. (1961) On Becoming a Person: A Therapist's View of Psychotherapy. Houghton Mifflin, Boston.

[48] Feldman, D., & Benjamin, A. (2019). Creativity and Education: An American Retrospective. Cambridge Journal of Education, 36, 319-336. https://doi.org/10.1080/03057640600865819

[49] Sternberg, R. (2019). Creative thinking in the classroom. Scandinavian Journal of Educational Research, 47(3), 325-338.

[50] Darling-Hammond, L. (2020). Teacher Education and the American Future. Journal of Teacher Education, 61, 35-47. http://dx.doi.org/10.1177/0022487109348024

[51] Hartley, K. (2019). Video Technology as a Support for Teacher Education Reform. Journal of Technology and Teacher Education, 11, 105-138.

[52] Glăveanu, V. P. (2019). The psychology of creativity: A critical reading. 1, 10-32.

[53] MacDonald, S.P. (2020). Professional Academic Writing in the Humanities and Social Sciences, 2nd ed.; SIU Press: Carbondale, IL, USA, 2010

[54] McLean, N.; Georgiou, H.; Matruglio, E.; Turney, A.; Gardiner, P.; Jones, P.; Edwards-Groves, C. (2021). Understanding creativity in primary English, science, and history. Aust. Educ. Res. 2021, 1–20

[55] Christie, F.; Maton, K. (2021). Disciplinarity: Functional Linguistic and Sociological Perspectives; Bloomsbury Publishing: London, UK, 2011.

[56] Gall, M. D., Gall, J. P., & Borg, W. R. (2019). Educational research: An introduction (8th ed.). Boston: Allyn & Bacon.

[57] McNamara, C. (2019) General Guidelines for Conducting Interviews. http://managementhelp.org/evaluatn/intrview.htm

[58] Braun, V., and Clarke, V. (2020). Using Thematic Analysis in Psychology. Qualitative Research in Psychology, 3, 77-101. https://doi.org/10.1191/1478088706qp063oa

[59] Braun V, and Clarke V (2021) Successful qualitative research: a practical guide for beginners. Sage Publications, USA.

[60] Holloway, I., & Todres, L. (2003). The status of method: Flexibility, consistency and coherence. Qualitative Research, 3(3), 345–357. https://doi.org/10.1177/1468794103033004

[61] Spradley, J. P. (2019). Participant observation. Wadsworth, Cengage Learning.

[62] Starko, A. (2020). Creativity in the Classroom: Schools of Curious Delight (3rd ed.). Lawrence Erlbaum Associates

[63] Piirto, J. (2019). The five core attitudes and seven I's of the creative process. In R. Beghetto & J. Kaufman (Eds.), Nurturing creativity in the classroom (pp. 131-161). New York, NY: Cambridge University Press.

[64] Sternberg, R. (2019). Creative thinking in the classroom. Scandinavian Journal of Educational Research, 47(3), 325-338.

[65] Haslam, S. A., Adarves-Yorno, I., Postmes, T., & Jans, L. (2019). The collective origins of valued originality. Personality and Social Psychology Review, 17(4), 384-401.

[66] Schinke, R. J., Bloom, G. A., & Salmela, J. H. (2019). The Career Stages of Elite Canadian Basketball Coaches.

[67] Stelmack, R. M. (2019). Stability of Personality Across the Life Span: A Meta-Analysis. In R. M. Stelmack (Ed.), On the psychobiology of personality: Essays in honor of Marvin Zuckerman (pp. 113–144). Elsevier Science. https://doi.org/10.1016/B978-008044209-9/50009-9

[68] Grolnick, W. S., & Slowiaczek, M. L. (2019). Parents' Involvement in Children's Schooling: A Multidimensional Conceptualization and Motivational Model. Child Development, 65, 237-252. https://doi.org/10.1111/j.1467-8624.1994.tb00747.x Buzan, T. (2019). Mind mapping. Executive Excellence, 8(8), 1-3.

[69] Kiely, M. C. (2019). A piece of good news: Teaching as a creative process. Canadian Psychology, 40(1), 30-38.

[70] Harris, A., & de Bruin, L. (2019). An international study of creative pedagogies in practice in secondary schools: Toward a creative ecology. Journal of Curriculum and Pedagogy, 15(2), 215-235.

[71] Davies, D., Jindal-Snape, D., Digby, R., Howe, A., Collier, C., & Hay, P. (2019). The roles and development needs of teachers to promote creativity: A systematic review of literature. Teaching and Teacher Education, 41, 34-41.

[72] Henriksen, D., & Mishra, P. (2019). We teach who we are: Creativity in the lives and practices of accomplished teachers. Teachers College Record, 117(7), 1-46.

[73] Saebø, A. B., McCammon, L. A., & O'Farrell, L. (2019). Creative teaching-teaching creativity. Caribbean Quarterly, 53(1-2), 205-215.

[74] McWilliam, E. (2019). Teaching for creativity: From sage to guide to meddler. Asia Pacific Journal of Education, 29(3), 281-293.

[75] Davies, L., Newton, D., & Newton, L. (2019). Creativity as a Twenty-First-Century Competence: An Exploratory Study of Provision and Reality. Education 3-13, 46(7), 879-891. https://doi.org/10.1080/03004279.2017.1385641

[76] Ritchhart, R., & Perkins, D. (2019). Making thinking visible. Educational Leadership, 65(5), 57-61. Robinson, K. (2011). Out of our minds: Learning to be creative (2nd ed.). Oxford: Capstone.

[77] Deal, T.E. and Kennedy, A.A. (2019) Corporate Cultures: The Rites and Rituals of Corporate Life. Addison Wesley Publishing Company, Reading, 126.

[78] Hopkins, D., Harris, A., & Jackson, D. (2019). Understanding the school's capacity for development: Growth states and strategies. School Leadership & Management, 17(3), 401-411.

[79] Reynolds, M. (2019). Critical reflection and management education: Rehabilitating less hierarchical approaches. Journal of Management Education, 23(5), 537-553.

[80] Von Oech, R. (2019). A whack on the side of the head: How you can be more creative (3rd ed.). New York: Warner Books.

[81] Le, H., Janssen, J., & Wubbels, T. (2019). Collaborative learning practices: Teacher and student perceived obstacles to effective student collaboration. Cambridge Journal of Education, 48(1), 103-122.

[82] Slater, L. (2019). Collaboration: A framework for school improvement. International Electronic Journal for Leadership in Learning, 8(5). 1-19.

[83] Fautley. M & Savage, J. (2020). Creativity in Secondary Education. Exeter: learning Matters Lda.

[84] Huckman, R., & Pisano, G. (2019). The firm specificity of individual performance: Evidence from cardiac surgery. Management Science, 52(4), 473-488.

[85] Baguley, M., Kerby, M., MacDonald, A., & Cruickshank, V. (2020). Strangers on a train: The politics of collaboration. The Australian Educational Researcher.

[86] Plucker, J. A., and Gorman, M. E. (2019). Invention is in the mind of the adolescent: effects of a summer course one year later. Creat. Res. J. 12, 141–150. doi: 10.1207/s15326934crj1202_6

[87] Burnard, P., & White, J. (2019). Creativity and performativity: Counterpoints in British and Australian education. British Educational Research Journal, 34(5), 667-682.

[88] Cullen, J., & Johnston, L. (2020). Using quality circles in the classroom to improve student learning and satisfaction. Journal of Nursing Education, 38(8), 368-370.

[89] Sawyer, K. (2021). Extending sociocultural theory to group creativity. Vocations and Learning, 5(1), 59-75.

[90] Glăveanu, V. P. (2019). The psychology of creativity: A critical reading. 1, 10-32.

[91] Gregory, E., Hardiman, M., Yarmolinskaya, J., Rinne, L., & Limb, C. (2019). Building creative thinking in the classroom: From research to practice. International Journal of Educational Research, 62(C), 43-50.

[92] Flavell, J. (2019). Metacognition and cognitive monitoring. A new area of cognitive development inquiry. American Psychologist, 34(10), 906-911.

[93] Puryear, J. S. (2019). Inside the creative sifter: Recognizing metacognition in creativity development. Journal of Creative Behavior, 50(4), 321-332.

[94] Papleontiou-Louca, E. (2021). The concept and instruction of metacognition. Teacher Development, 7(1), 9-30. Partnership for 21st Century Learning. (2021). The 4cs research service. Retrieved from http://www.p21.org/

[95] Yilmaz-Tuzun, O., & Topcu, M. S. (2020). Investigating the relationships among elementary school students' epistemological beliefs, metacognition, and constructivist science learning environment. Journal of Science Teacher Education, 21(2), 255-273.

[96] Karpov, Y. V., & Haywood, H. C. (2019). Two ways to elaborate Vygotsky's concept of mediation: Implications for instruction. American Psychologist, 53(1), 27-36.

[97] Cross (2020). Language Teaching as Sociocultural Activity: Rethinking Language Teacher Practice The Modern Language Journal. vol 94 issue 3,

[98] Harris, K. R., Graham, S., Brindle, M., & Sandmel, K. (2021). Metacognition and Children's Writing. In D. Hacker, J. Dunlosky, & A. Graesser (Eds.), Handbook of Metacognition in Education (pp. 131-153). Mahwah, NJ: Lawrence Erlbaum

[99] Goos, M., Galbraith, P., & Renshaw, P. (2022). Socially mediated metacognition: Creating collaborative zones of proximal development in small group problem solving. Educational Studies in Mathematics, 49(2), 193-223.

[100] Van de Kamp, M., Admiraal, W., van Drie, J., & Rijlaarsdam, G. (2021). Enhancing divergent thinking in visual arts education: Effects of explicit instruction of meta-cognition. British Journal of Educational Psychology, 85(1), 47-58.

[101] Yaniv, D. (2021). Dynamics of creativity and empathy in role reversal: Contributions from neuroscience. Review of General Psychology, 16(1), 70-77.

[102] Dolby, N. (2020). Rethinking multicultural education for the next generation: The new empathy and social justice. New York: Routledge.

[103] Lipman, M. (2020). Thinking in education. Cambridge: Cambridge University Press.

[104] Brown, S., & Vaughan. (2020). Play: How it shapes the brain opens the imagination and invigorates the soul. Brunswick, Victoria: Scribe Publications.

[105] Fisher, K., Hirsch-Pasek, K., Golinkoff, R., Singer, D., & Berk, L. (2021). Playing around in school: Implications for learning and educational policy. In A. Pellegrini (Ed.), Oxford library of psychology (pp. 341-361). New York, NY: Oxford University Press.

[106] Lawless, K. A., & Pellegrino, J. W. (2019). Professional development in integrating technology into teaching and learning: Knowns, unknowns, and ways to pursue better questions and answers. Review of Educational Research, 77(4), 575-614.

[107] Ponticell, J. A. (2020). Enhancers and inhibitors of teacher risk taking: A case study. Peabody Journal of Education, 78(3), 5-24. Project Zero. Pedgogy of Play. Retrieved from http://www.pz.harvard.edu/projects/pedagogy-of-play

[108] Dadds, M. R., & Hawes, D. J. (2020). Cognitive and affective empathy in children with conduct problems: Additive and interactive effects of callous–unemotional traits and autism spectrum disorders symptoms. Psychiatry Research, 219(3), 625–630. https://doi.org/10.1016/j.psychres.2014.06.025

[109] Eberle, S. G. (2019). The elements of play: Toward a philosophy and a definition of play. American Journal of Play, 6(2), 214-233.

[110] Fine, S. (2019). A slow revolution: Toward a theory of intellectual playfulness in high school classrooms. Harvard Educational Review, 84(1), 1-23,134-135.

[111] Wilhelm, J. D. (2020). Classroom conversation: Inquiry, dialogism, and deep understanding. Voices from the Middle, 22(1), 74-76.

[112] Bakhtin, M. M., Emerson, C., & Holquist, M. (2020). The dialogic imagination: Four essays. Austin: University of Texas Press.

[113] Sternberg, R. (2020). Teaching for creativity. In R. A. K. Beghetto (Ed.), Nurturing creativity in the classroom (pp. 355-380). New York, NY: Cambridge University Press.