

The Current State and Trends of Creativity Research in Educational Management: A Literature Review

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Abstract: *This study utilizes a literature review methodology to explore creativity in educational management. We searched for relevant articles using three key words: "creativity," "educational management," and "innovation in education." Gathering data from a wide range of academic databases, the research delves deeply into the definitions of creativity and its theoretical models from perspectives of psychology, education, and management, such as the Four P Model, Systems Model, Input - Process - Output Model, and Dual Pathway Model. The review identifies key areas where creativity is applied within educational management, including the development of policies that promote creative environments, leadership styles, and teaching methods. It also discusses the influence of personal and psychological factors, as well as environmental and cultural factors, on creativity. Current research trends highlight an emphasis on interdisciplinary approaches, integration of digital technology, innovation in assessment methods, and the impact of educational policies, underlining the necessity for personalized learning paths. Lastly, the article calls for future research to expand the literature base, employ mixed methods, engage in cross-cultural comparative studies, explore new technologies, and develop new tools for assessing creativity, to more comprehensively understand and foster creativity development within the context of educational management.*

Keywords: Creativity, Educational Management, Key Areas of Creativity, Influencing Factors

1. Introduction

In today's rapidly changing and technology-driven society, creativity is widely considered one of the key elements for the success of individuals and organizations. Educational management, as a critical domain for shaping future innovators and leaders, plays an essential role in cultivating students' creative thinking abilities. Patston et al. (2021) emphasized that creativity not only concerns the generation of novel and useful ideas but also involves the process of realizing these ideas, a process that is particularly important in educational settings [1].

In recent years, researchers and practitioners in the field of education have increasingly recognized that traditional teaching methods and management models may not be sufficient to meet the challenges of the 21st century, especially in terms of cultivating students' creativity and innovation skills [2]. This recognition has generated a demand for innovation in educational management practices and policies, aimed at creating an environment that fosters creative thinking and learning [3].

However, despite widespread recognition of the importance of creativity, there are still challenges in effectively managing and promoting creativity within the educational environment. Educational managers face the task of integrating resources, designing curricula, implementing policies, and assessing teaching methods to support the development of creativity [4]. Furthermore, with the development of educational technology, how to utilize these new tools to foster learners' creative

thinking has also become a significant issue [5].

Therefore, conducting a literature review on the current state and trends of creativity research within the field of educational management not only provides educational scholars with a comprehensive view of the knowledge structure and progress in this area but also offers educational managers and policymakers strategies and methods to promote creativity in practice. This article aims to review relevant literature, discuss the current application of creativity in educational management, analyze factors affecting the development of creativity, and outline the current research limitations and directions for future research.

2. Methodology

This study employs a systematic literature review approach, aimed at comprehensively collecting, evaluating, and synthesizing the current state and trends of research on creativity within the field of educational management. Below is our literature review process:

2.1 Literature Search Strategy

We conducted literature searches across multiple electronic databases, including Web of Science, ERIC, and Google Scholar, to ensure a broad coverage of academic fields. The search terms used were "creativity," "educational management," and "innovation in education." The search was limited to literature published between 1950 and 2023 to capture the research dynamics and trends over the past two

decades.

2.2 Literature Screening Process

The initial search results underwent two rounds of screening. First, literature unrelated to educational management or not explicitly discussing creativity based on titles and abstracts was excluded. Then, the remaining literature was subjected to a full - text review to further exclude documents that did not meet the quality standards, such as non - peer - reviewed articles and conference abstracts.

2.3 Literature Analysis Method

The selected literature was analyzed using content analysis to identify and summarize the main themes, research methods, findings, and trends regarding creativity in educational management.

3. Theoretical Background of Creativity

In the research and practice of educational management, the definition and understanding of creativity are diverse, reflecting the concept's wide application across different disciplines and research traditions. The following discussion addresses the definition of creativity and its application in the study of educational management:

3.1 Definition of Creativity

Firstly, from the perspective of psychology, psychologists typically define creativity as the ability to generate novel and useful (or adaptive) ideas, solutions, discoveries, products, or forms of art [6]. This perspective highlights two fundamental elements of creative thinking: originality and usefulness. Secondly, from the perspective of education, creativity is seen as a key ability that can be cultivated and developed in various learning environments, not limited to traditionally “creative” subjects like art or music [7]. The educational perspective believes that everyone has the potential for creativity, and one of the purposes of education is to stimulate and cultivate this potential by providing suitable environments and opportunities. Lastly, from the perspective of management, creativity is viewed as a key driver of organizational innovation and adaptation to change. In educational management, this involves designing curricula, creating learning environments, and formulating policies to promote creative thinking and behavior among students, teachers, and administrators [8].

Despite differences in the definition of creativity across disciplines, these perspectives all emphasize the importance of creativity as a multidimensional concept. Educational managers and researchers need to deeply understand these definitions to more effectively foster and assess the development of creativity.

3.2 Theoretical models of creativity

Theoretical models of creativity provide crucial frameworks

for understanding the essence of creativity, how to measure it, and how to foster it across various environments. Here are four key creativity theoretical models that are widely cited and discussed in the literature:

First is the Four P Model [9]. Proposed by Mel Rhodes (1961), the Four P Model is one of the most famous frameworks in creativity research, dividing creativity into four dimensions: Person, Process, Product, and Press. Person involves individual traits such as intelligence, knowledge, thinking style, personality traits, motivation, and beliefs that influence creativity. Process pertains to the process of creative thinking, including problem identification, information gathering, idea generation, and evaluation. Product is the result of creative efforts, encompassing novel and useful ideas, solutions, or works. Press refers to the socio - cultural and physical environmental factors that impact creativity. Second is the Systems Model [10]. Csikszentmihalyi (2015) proposed the Systems Model, emphasizing that creativity results from the interaction among the individual, the domain, and the field's gatekeepers (such as experts and reviewers). This model posits that an idea or product is considered creative not only if it comes from the individual but also if it is accepted by experts within a specific domain and incorporated into the existing knowledge system. Third is the Input - Process - Output Model [11]. Amabile's (1983) Componential Theory views creativity as a function of inputs, cognitive processes, and outputs. Inputs include domain - relevant skills, creative thinking skills, and task motivation; the process involves problem definition, preparation, response generation, response validation, and communication; outputs are creative outcomes, evaluated by domain experts for their novelty and applicability. Lastly is the Dual Pathway Model [12]. Developed by Guilford (1950) and subsequent researchers, the Dual Pathway Model distinguishes between divergent and convergent thinking. Divergent thinking refers to expanding thoughts in different directions to find multiple possible solutions, while convergent thinking is the ability to find a single correct answer from known information. Both thinking modes play crucial roles in solving creative problems.

These theoretical models offer a multidimensional perspective for understanding and researching creativity, highlighting the complexity of the phenomenon involving individual traits, cognitive processes, socio - cultural environments, and domain - specific knowledge and evaluation standards.

4. The Current Application of Creativity in Educational Management

4.1 Education Policy and Creativity

Educational policy plays a decisive role in shaping the school environment, teacher behavior, and ultimately student learning outcomes. Educational policies include but are not limited to curriculum standards, guidance on teaching methods, assessment and examination systems, teacher development and certification, and resource allocation. These policies directly or indirectly affect the school's teaching

practices and students' learning experiences, thereby influencing the cultivation of creativity.

Kennedy & Sundberg (2020) argued that educational reforms need to prioritize the cultivation of creativity and innovation skills, rather than focusing solely on traditional academic achievement [13]. Meanwhile, Conradt & Bogner (2020) discussed how educational policies can promote student creativity by providing supportive learning environments and encouraging professional development for teachers [14]. Additionally, González - Pérez & Ramírez - Montoya (2022) emphasized the importance of creativity in solving complex problems of the 21st century and explore how the education system can address this challenge through policy adjustments [15].

The impact of educational policies on the cultivation of creativity is multifaceted, involving aspects such as curriculum design, teaching methods, assessment systems, and resource allocation. To effectively foster student creativity, policymakers need to consider these factors comprehensively and formulate policies that promote innovative thinking and creative learning. Simultaneously, educational managers and teachers should actively adapt to these policies, creating teaching and learning environments conducive to the development of student creativity.

4.2 Educational Leadership Styles and Creativity

Educational leadership styles and management practices play a crucial role in either fostering or hindering the development of creativity, with the key lying in the choice of leadership styles and the design of practices.

Transformational leadership promotes creativity by encouraging innovative thinking, providing inspiration, personalized attention, and intellectual stimulation. Research has shown that when leaders exhibit high expectations, offer support to staff, and challenge the status quo, they can stimulate the creative potential of both teachers and students [16]. The leadership styles, by creating a supportive environment that encourages risk - taking and tolerates failure, provide space for teachers and students to explore new ideas and innovative attempts [17]. However, transactional leadership, focused on task completion and reward - punishment systems, along with excessive control and micromanagement, may suppress individual autonomy and innovative capability, thereby limiting the development of creativity [18]. Additionally, if leaders neglect positive feedback on innovative attempts or adopt a negative attitude towards failure, it can reduce the individual's willingness to explore the unknown and take risks [19].

Therefore, educational leaders need to adopt leadership styles and management practices that promote innovation, creating an environment that encourages innovation, experimentation, and personalized expression among teachers and students to support the comprehensive development of creativity.

4.3 Teaching Methods and Creativity

In educational management and practice, the adoption of various teaching strategies and methods plays a crucial role in stimulating students' creativity.

Project - based learning, as a student - centered teaching method, involves students in real - world and meaningful projects, promoting in - depth learning and encouraging students to explore, ask questions, collaborate, and reflect, thereby aiding the development of creativity and critical thinking [20]. Similarly, inquiry - based learning emphasizes starting with students' questions, motivating students to engage in self - directed learning and creative thinking through activities such as posing questions, gathering information, and analyzing data [21]. Collaborative learning facilitates interaction among students through group work, not only enhancing social interaction skills but also stimulating creativity as it encourages students to share ideas and discuss different perspectives [22]. With the advancement of educational technology, technology - enhanced learning provides rich resources and interactivity, such as programming education and virtual reality, offering students a space to explore and experiment, further fostering the development of innovative thinking [23].

The effective integration of these teaching methods can create a learning environment that supports student exploration, collaboration, innovation, and critical thinking, which is essential for cultivating students' creativity.

5. Factors Influencing Creativity

5.1 Personal and Psychological Factors

Personal traits, motivation, and attitudes are important psychological factors that affect the development of creativity. These factors determine at an individual level how a person perceives external information, addresses problems, and their potential for innovative thinking.

Personal traits, such as openness, curiosity, self - efficacy, and tolerance for novelty, provide a psychological foundation for creative thinking, making individuals more willing to explore unknown areas and accept new ideas [24]. Motivation, especially intrinsic motivation, is considered a powerful driver of creativity; individuals are more likely to exhibit creativity when they engage in activities out of genuine interest and satisfaction [25]. Additionally, an individual's attitude, including acceptance of failure and openness to innovation, is equally critical for promoting or inhibiting creative attempts. People with a positive attitude and a willingness to continue learning are more capable of maintaining creativity when facing challenges [26]. These factors interact with each other, collectively influencing an individual's level of creativity, highlighting the psychological dimensions that need to be considered in fostering creativity. Understanding how these psychological factors affect creativity can help educators and organizations formulate strategies to support and enhance individuals' innovative

potential.

5.2 Environmental and Cultural Factors

The educational environment, school culture, and societal culture are key environmental and cultural factors affecting individual creativity development. The educational environment includes resources provided by schools, teaching methods, and curriculum content, directly impacting students' learning experiences and the cultivation of creativity [27]. School culture, encompassing educational philosophies, values, behavioral norms, and communication styles, plays a crucial role in fostering students' creativity. A school culture that encourages innovation, tolerates failure, and values the process rather than focusing solely on outcomes can provide students with a safe space to experiment, thereby fostering the development of creativity [28]. Additionally, societal culture profoundly impacts individual creativity, as cultural values, societal expectations, and attitudes towards innovation determine the extent to which creativity is accepted by society and the motivation of individuals to engage in creative activities [29]. Societal support and rewards for innovation can motivate individuals to pursue innovation, while tolerance for failure and understanding of the innovation process are important conditions for cultivating creativity. Therefore, creating an educational environment and cultural atmosphere conducive to the development of creativity requires the joint efforts of educators, policymakers, and all sectors of society to provide the necessary resources, create supportive learning and working environments, and cultivate open and inclusive societal cultural values.

6. Discussion

The main trends in creativity research within educational management are reflected in several key aspects: First, there is an increasing adoption of interdisciplinary approaches, combining perspectives from psychology, education, management, and cognitive science to thoroughly explore the multidimensional characteristics of creativity and its application in educational management. Second, with the rapid development of digital technology, exploring how to leverage technology to support creativity education has become a research hotspot, encompassing innovative applications of digital tools, online platforms, and virtual reality. Additionally, innovation in creativity assessment methods is receiving attention, with researchers exploring diverse assessment methods including portfolio assessment, self-assessment, and peer assessment, aimed at more comprehensively evaluating and promoting students' innovative abilities. The impact of educational policies and systems on the cultivation of creativity is also a focal point of research, analyzing how policies in areas such as curriculum standards, teaching methods, and teacher professional development influence creative development. Finally, the importance of personalized learning is increasingly recognized, with research supporting the provision of customized learning paths for students to meet their varied needs and interests, thereby stimulating creative thinking. Together, these trends reflect the academic community's

ongoing exploration and innovation in more effectively understanding and fostering creativity development within educational environments.

7. Conclusion

In this study, researchers have thoroughly explored the multidimensionality of creativity in the field of education and its influence by various factors such as educational policies, leadership styles in education, teaching methods, as well as individual and psychological factors, and environmental and cultural factors. The main findings emphasize that creativity is not merely a manifestation of individual traits but a comprehensive phenomenon involving complex processes and diverse outputs. It requires a supportive environment and culture, along with innovative management strategies for its full development. These findings highlight the importance and complexity of fostering and supporting the development of creativity in educational management, while also pointing out areas that need further research and exploration, including the application of interdisciplinary approaches and the promotion of personalized learning. In summary, cultivating creativity in educational management presents a multifaceted and multilevel challenge that necessitates the collective effort of educators, policymakers, and researchers to ensure that every student can realize their maximum creative potential in a supportive and innovative learning environment.

8. Limitation and Suggestions for Further Study

Although this study provides a comprehensive overview of the current state and trends of creativity research within educational management, it has some limitations, which also indicate potential directions for future research.

8.1 Limitations

Research Scope Limitation: This study primarily focuses on published academic articles and books, possibly not covering all relevant literature and non-English documents, which may limit the understanding of the full picture of creativity research in educational management. **Cultural and Regional Differences:** Most studies are concentrated within specific cultural and regional contexts, which may limit the general applicability of the findings, particularly in terms of research on creativity development in different educational systems and cultural backgrounds.

8.2 Suggestions for Further Research

The following suggestions are proposed: Firstly, to expand the research scope, future studies should strive to include a wider range of literature sources, such as non-English literature and reports from practice communities, to gain a more comprehensive research perspective. Secondly, to adopt mixed-methods research, to overcome challenges brought by methodological diversity, future research could employ mixed-methods research designs, combining quantitative and qualitative research methods to deeply understand the

complexity of creativity in educational management. Thirdly, to conduct cross - cultural and international comparative studies, considering the impact of cultural and regional differences on creativity research, future studies should engage in more cross - cultural and international comparative research to explore the similarities and differences in creativity development across different educational systems and cultural backgrounds. Fourthly, to focus on innovative applications of technology, with the continuous development of emerging technologies, future research should explore new pathways and challenges for promoting creativity in educational management, such as the application of artificial intelligence, virtual reality, and gamified learning. Lastly, to study new methods of creativity assessment, considering the complexity of creativity assessment, future research needs to develop and validate new creativity assessment tools and indicators to more accurately measure and understand the creativity of students and teachers.

By overcoming these limitations and adopting these suggestions, future research will be able to explore the multidimensionality of creativity in educational management more deeply, providing more effective strategies and practical suggestions for cultivating the next generation of innovators.

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