Brief Report
Volume 16:06, 2025

Arts and Social Sciences Journal

ISSN: 2151-6200

Open Access

Innovation & Creativity: Diverse Methodologies & Applications

Yuuko Tanaka*

Department of Media Studies, Osaka University, Osaka, Japan

Introduction

A significant body of research explores methodologies for fostering innovation and creative thinking. One key approach involves integrating Design Thinking and Lean Startup principles to drive innovation in complex organizational settings, providing a systematic framework for developing new solutions from initial problem identification through iterative testing and refinement. This creates a dynamic pathway for innovation [1].

Design Thinking also proves valuable for Small and Medium-sized Enterprises (SMEs) in identifying and capitalizing on innovative opportunities, outlining a practical framework for structured innovation and problem-solving [3]. Furthermore, its application extends to the healthcare sector, where a systematic review highlights Design Thinking as a creative methodology to improve patient experiences, optimize processes, and develop novel medical solutions, establishing a powerful user-centered path for healthcare innovation [10].

Developing creative thinking is a central focus, with several methodologies addressing this. Integrating STEAM (Science, Technology, Engineering, Arts, and Mathematics) activities, for instance, cultivates creative thinking skills, demonstrating how interdisciplinary, hands-on, and project-based approaches significantly enhance students' ability to think creatively and solve problems, effectively building creative capacity through practical engagement [2]. Similarly, a creative problem-solving methodology is specifically designed to enhance entrepreneurial skills in higher education, equipping students with the capacity to generate novel solutions and adapt to dynamic challenges, fostering an innovative mindset [4]. Problem-based learning (PBL) also stands out, outlining a methodology to develop creative thinking abilities by engaging with real-world problems, which stimulates inventive capacity and critical reasoning, making learning dynamic and effective for fostering genuine creativity [8].

Beyond specific learning contexts, the broader impact of creative methodologies on fostering both critical and creative thinking skills is explored. Structured creative approaches are shown to significantly improve an individual's ability to analyze information discerningly while simultaneously generating innovative ideas, underscoring the vital connection between creativity and critical thought [5]. The concept of an 'agile creative process' is introduced as a dynamic methodology for innovation development, emphasizing iterative cycles, adaptability, and continuous feedback loops to achieve more efficient and effective innovation outcomes, building flexibility into the creative process [6]. Another methodology proposes strategically combining various creativity tools and techniques to effectively foster innovation within organizations, illustrating how different creative methods can be integrated into a cohesive and comprehensive framework for systematically generating and implementing novel ideas [7].

Specific research delves into specialized applications, such as the exploration of digital ethnography alongside creative methodologies within design education research. This approach provides rich insights into learning processes and their corresponding outcomes, particularly when conducted in technologically mediated learning environments, offering unique perspectives for a deeper understanding of student creativity in design [9]. Collectively, these studies underscore the multifaceted nature of creativity and innovation, proposing diverse methodological frameworks tailored to various challenges and contexts, from education and organizational development to specific industry sectors like healthcare and entrepreneurship.

Description

The presented data extensively highlights the versatility of Design Thinking as a methodology for driving innovation. One article introduces a combined approach that integrates Design Thinking with Lean Startup principles, offering a systematic framework for developing new solutions, moving from initial problem identification through iterative testing and refinement to create a dynamic pathway for innovation [1]. This framework is particularly relevant for complex organizational settings. Furthermore, Design Thinking is shown to be highly effective for Small and Medium-sized Enterprises (SMEs) in identifying and capitalizing on innovative opportunities. A practical framework is outlined to help SMEs apply Design Thinking principles, fostering a more structured approach to innovation and problem-solving, which empowers smaller businesses to find their creative edge [3].

Expanding on its application, a systematic review examines Design Thinking as a creative methodology specifically for innovation within the healthcare sector. This review synthesizes literature to demonstrate how Design Thinking principles can improve patient experiences, optimize processes, and develop novel medical solutions, establishing a powerful, user-centered path for healthcare innovation [10]. Beyond Design Thinking, research also explores the impact of various general creative methodologies on fostering both critical and creative thinking skills. It suggests that structured creative approaches can significantly improve an individual's ability to analyze information discerningly while simultaneously generating innovative ideas, emphasizing the crucial connection between creativity and critical thought [5].

Several studies focus on cultivating creative thinking abilities, especially within educational contexts. One research piece explores a methodology that integrates

STEAM (Science, Technology, Engineering, Arts, and Mathematics) activities to foster creative thinking skills. This study demonstrates how interdisciplinary, hands-on, and project-based approaches significantly enhance students' capacity to think creatively and solve problems, effectively building creative capacity through practical engagement [2]. Another study presents a creative problem-solving methodology designed to enhance entrepreneurial skills in higher education. It focuses on developing students' capacity to generate novel solutions and adapt to dynamic challenges, crucial traits for future entrepreneurs [4].

Problem-based learning (PBL) is identified as a robust methodology for developing creative thinking. An article outlines how engaging with real-world problems stimulates students' inventive capacity and critical reasoning, making learning more dynamic and effective for fostering creativity; in essence, learning by doing, especially when problems are involved, sparks genuine creativity [8]. In the realm of innovation development, the concept of an 'agile creative process' is introduced as a dynamic methodology. This process emphasizes iterative cycles, adaptability, and continuous feedback loops, aligning creative endeavors with agile principles to achieve more efficient and effective innovation outcomes, thereby building flexibility into how ideas are created [6].

Further research proposes methodologies for strategically combining various creativity tools and techniques to effectively foster innovation within organizational settings. This approach illustrates how different creative methods can be integrated into a coherent framework, allowing organizations to systematically generate and implement novel ideas. The key insight is that structured use of diverse tools leads to better innovation outcomes [7]. Lastly, the application of digital ethnography alongside creative methodologies within design education research is explored. This highlights how these approaches can provide rich insights into learning processes and outcomes, especially in technologically mediated environments, offering unique perspectives for understanding student creativity in design [9].

Conclusion

This collection of research explores diverse methodologies for fostering innovation and cultivating creative thinking across various contexts. A prominent theme involves integrating Design Thinking and Lean Startup principles, which together provide a systematic framework for developing new solutions in complex organizational environments, moving from initial problem identification through iterative testing and refinement. Design Thinking is also highlighted as valuable for Small and Medium-sized Enterprises (SMEs) to pinpoint innovative opportunities, and its utility extends significantly into the healthcare sector for improving patient experiences and optimizing processes.

Other studies emphasize cultivating creative thinking through interdisciplinary and practical engagement. Integrating STEAM (Science, Technology, Engineering, Arts, and Mathematics) activities significantly boosts students' creative thinking and problem-solving skills through hands-on learning. Creative problem-solving methodologies are also crucial for enhancing entrepreneurial skills in higher education, preparing students to generate novel solutions. Problem-based learning (PBL) stimulates inventive capacity and critical reasoning by engaging with real-world problems.

The broader impact of creative methodologies on both critical and creative thinking skills is examined, indicating that structured approaches can improve critical analysis alongside idea generation. The concept of an 'agile creative process' is introduced as a dynamic methodology for innovation, stressing iterative cycles and adaptability. Additionally, research details frameworks for combining diverse creativity tools and techniques to systematically generate and implement new ideas within organizations. Finally, digital ethnography, combined with creative methodologies, offers rich insights into design education, particularly in technologically mediated learning environments.

Acknowledgement

None.

Conflict of Interest

None.

References

1. Ana Carolina Brochado, Flávia Helena Xavier dos Santos, Guilherme Emrich, Luiz Cláudio de Lima Furlan. "A methodology for combining design thinking and lean startup to foster innovation in complex environments." *J. Bus. Res.* 161 (2023):113795.

2. Jesús M. Hernández-Barajas, Juan A. Moriana-Torres, Manuel R. Luna-Ruiz. "Developing creative thinking through a methodology based on the integration of STEAM activities." *Think. Skills Creat.* 47 (2023):101235.

3. Paola De Paoli, Eleonora Marra, Paolo Palamara, Antonio Parodi. "Design Thinking methodology for the identification of innovative opportunities in SMEs." *J. Bus. Res.* 153 (2022):205-214.

4. Marija Maršalek, Dajana Đuričić, Mislav Ante Omazić. "Creative problem-solving methodology for enhancing entrepreneurial skills in higher education." J. High. Educ. Skills Work-Based *Learn.* 11 (2021):1251-1267.

5. María G. Hernández-Serrano, Juan J. García-Botella, María del Mar Sánchez-García. "Exploring the effects of creative methodologies on the development of critical and creative thinking skills." *J. Innov. Knowl.* 8 (2023):100318.

6. Laura Carsten, Michael G. Goldsby, Matthew W. Rushing. "The agile creative process: A dynamic methodology for innovation development." *J. Bus. Res*. 130 (2021):668-669.

7. João Carlos Correia, Jorge Pinho de Sousa, António A. C. Vieira. "A methodology for combining creativity tools and techniques to foster innovation in organizations." *Eur. J. Innov. Manage.* 27 (2024):172-192.

8. Luis E. Quesada-Vázquez, M. Pilar Quicios-García, Antonio Sánchez-Gómez. "Methodology to develop creative thinking through problem-based learning." *Think. Skills Creat.* 39 (2021):100778.

9. Rachel Lee, Stephen Boyd, David Green. "Digital ethnography and creative methodologies in design education research." *Int. J. Art Des. Educ.* 39 (2020):120-132.

10. Mariana Caldas Barata, Ana Margarida Simão, Teresa Alexandra Vaz, Carlos Martins. "Design Thinking as a creative methodology for innovation in healthcare: A systematic review." *J. Bus. Res.* 170 (2024):114300.

How to cite this article: Tanaka, Yuuko. "Innovation & Creativity: Diverse Methodologies & Applications." *Arts Social Sci J* 16 (2025):692.

Address for Correspondence: Yuuko, Tanaka, Department of Media Studies, Osaka University, Osaka, Japan, E-mail: yuuko@tanaka.jp

Received: 01-Nov-2025, Manuscript No. assj-25-174904; **Editor assigned:** 03-Nov-2025, PreQC No. P-174904; **Reviewed:** 17-Nov-2025, QC No. Q-174904; **Revised:** 24-Nov-2025, Manuscript No. R-174904; **Published:** 01-Dec-2025, DOI: 10.37421/2151-6200.2025.16.692